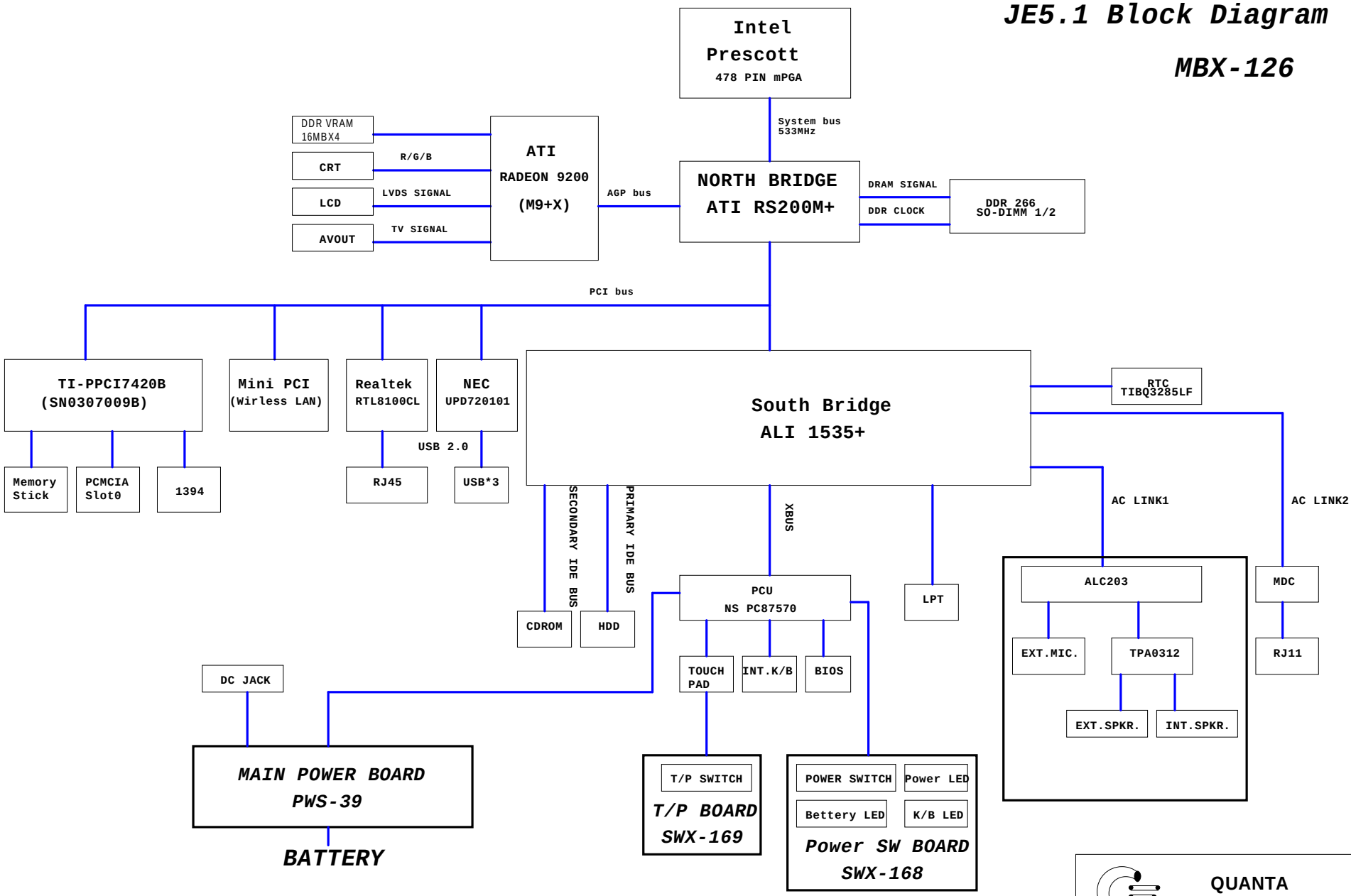
01

JE5.1 Block Diagram

MBX-126



Level 1 environment-related substances should NEVER be used.
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QUANTA COMPUTER

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05 RS200M-AGTL+

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21 AGP SSC
22 TI7420-A (CARDBUS+1394+MS)
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24 Cardbus slot
25 LAN interface RTL8100CL

26 MiniPCI & MDC
27 RTC/POWER GOOD LOGIC
28 IDE/HDD/LPT Connector
29 PCU NS 87570
30 Int. Keyboard/Bios/FAN

31 VCORE POWER 1
32 MAX1546(VCORE POWER 2)
33 MAX1632(5V/3V/12V)
34 MAX1844(2.5V/1.8V/1.25V)
35 MAX1844(VCC1.5)
36 Load Switch

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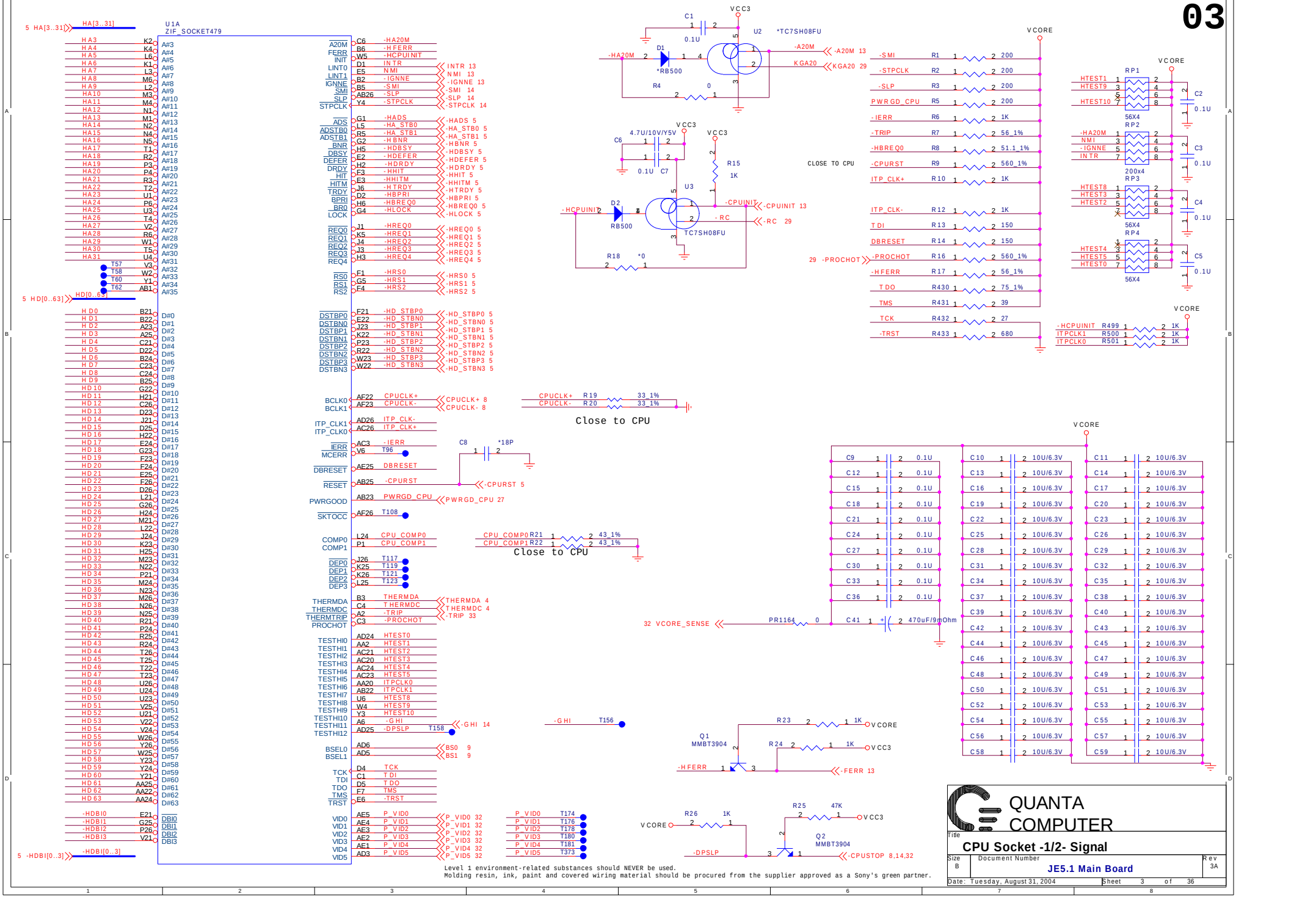
03
U1A
ZIF_SOCKET479
VCC3
VCORE
CLOSE TO CPU
Close to CPU
Close to CPU
Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.
QUANTA COMPUTER
Title
CPU Socket -1/2- Signal
Size B
Document Number
JE5.1 Main Board
Rev 3A
Date: Tuesday, August 31, 2004
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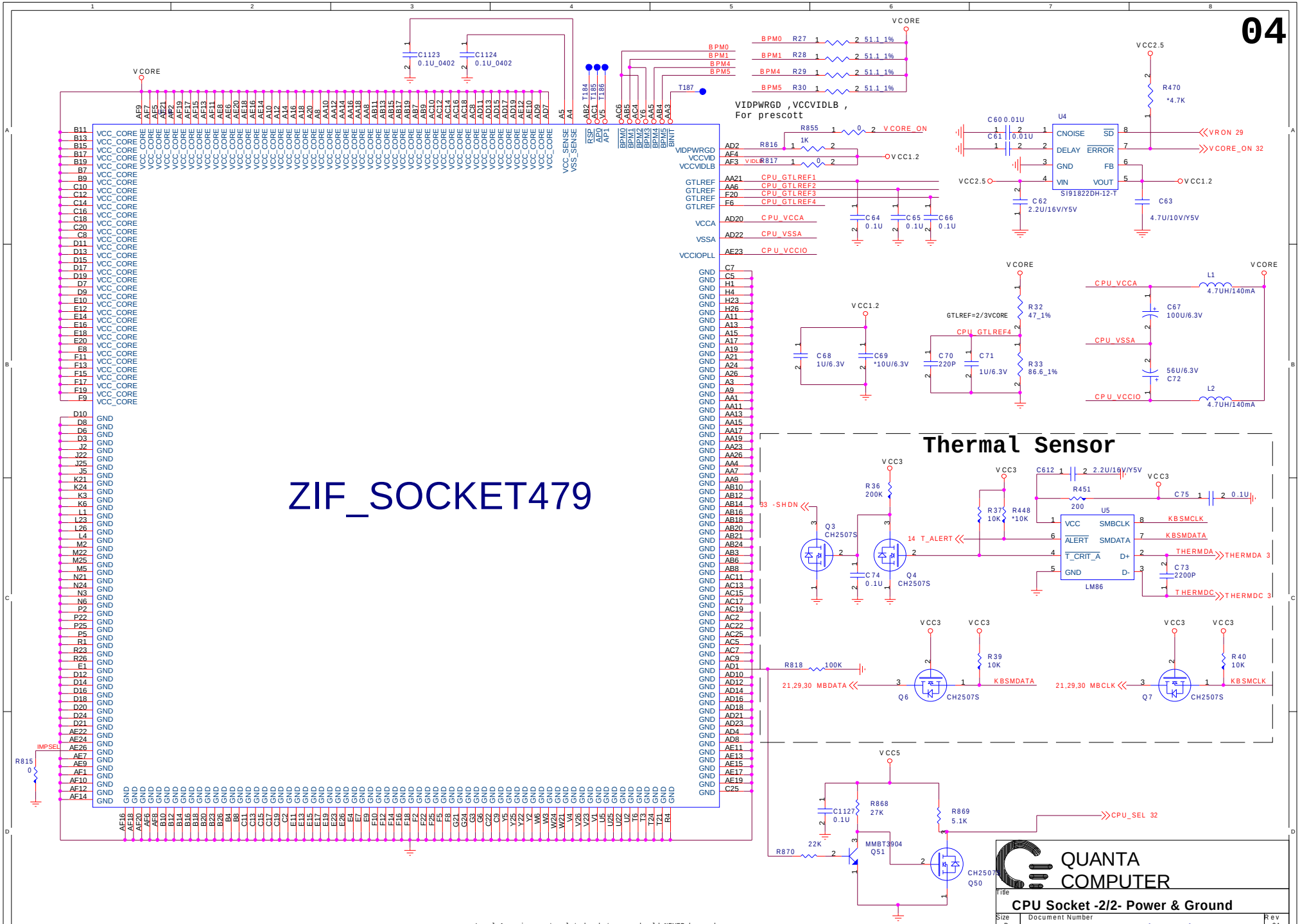
04
ZIF_SOCKET479
VIDPWRGD ,VCCVIDLB ,
For prescott
Thermal Sensor
CPU Socket -2/2- Power & Ground
QUANTA COMPUTER
JE5.1 Main Board
Size B
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Rev 3A
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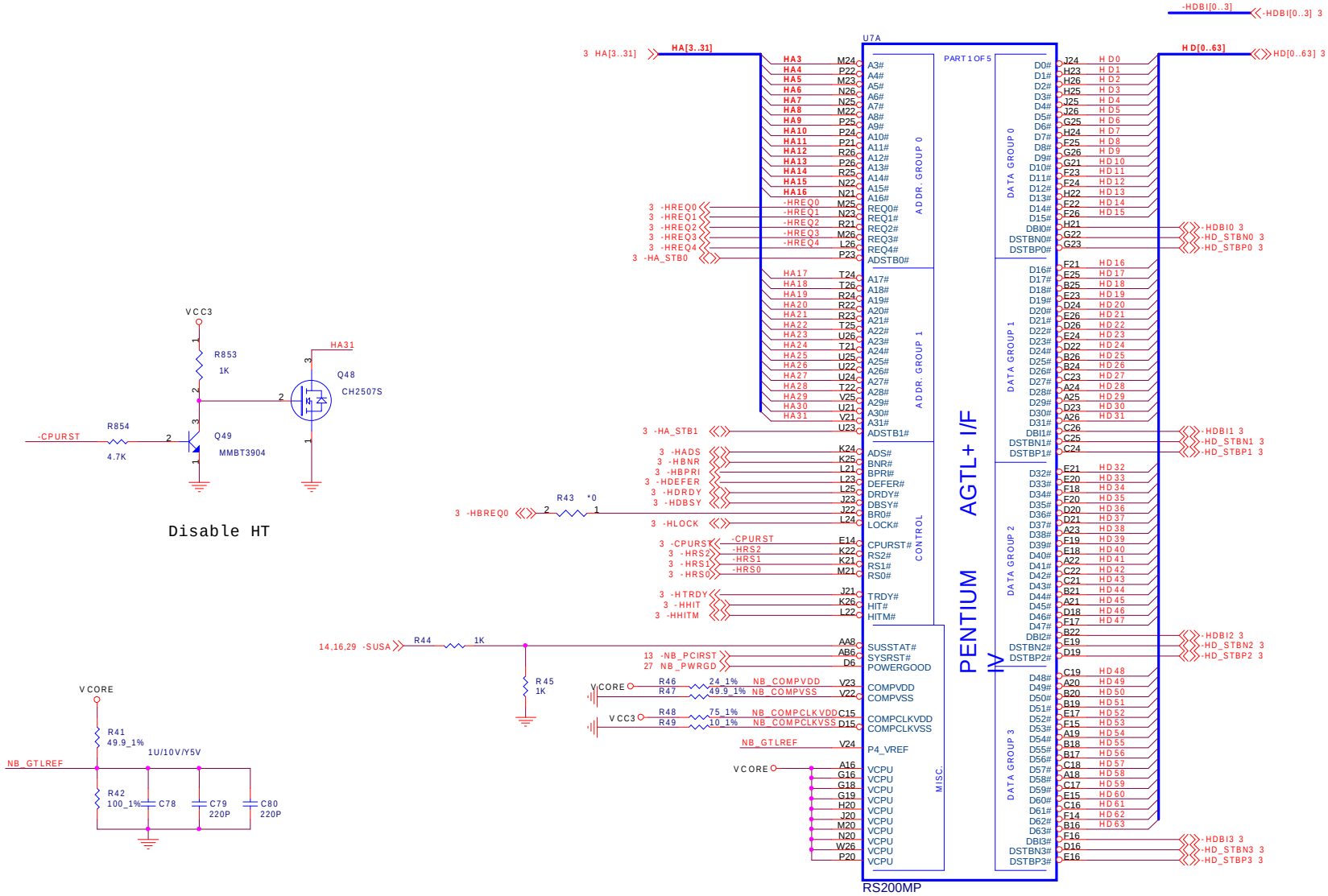
Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.



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QUANTA COMPUTER

Title	RS200M 1/4	
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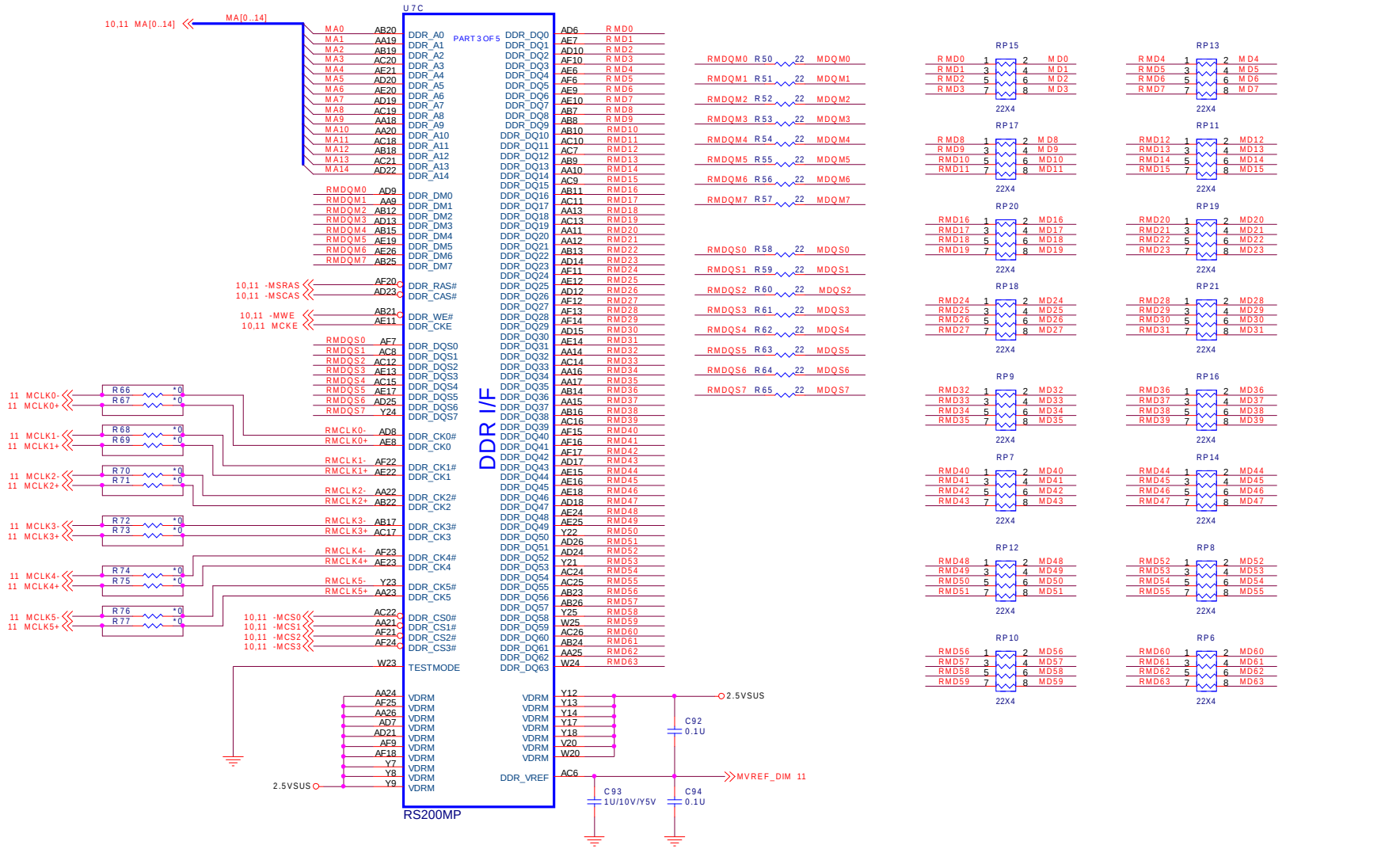
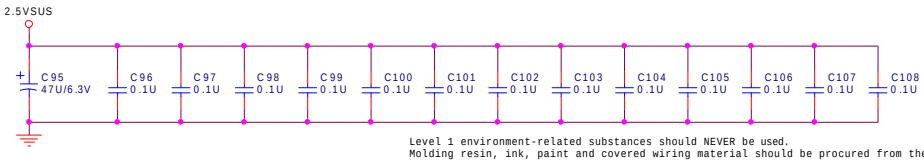
ATI_RS200M+ - 2 (DDR Interface)

06

MD[0..63] → MD[0..63] 10,11
MDQM[0..7] → MDQM[0..7] 10,11
MDQS[0..7] → MDQS[0..7] 10,11


U7C
PART 3 OF 5
DDR I/F
RS200MP
10,11 MA[0..14]
MA[0..14]
DDR_A0 DDR_A1 DDR_A2 DDR_A3 DDR_A4 DDR_A5 DDR_A6 DDR_A7 DDR_A8 DDR_A9 DDR_A10 DDR_A11 DDR_A12 DDR_A13 DDR_A14
DDR_DM0 DDR_DM1 DDR_DM2 DDR_DM3 DDR_DM4 DDR_DM5 DDR_DM6 DDR_DM7
DDR_RAS# DDR_CAS#
DDR_WE# DDR_CKE
DDR_DQS0 DDR_DQS1 DDR_DQS2 DDR_DQS3 DDR_DQS4 DDR_DQS5 DDR_DQS6 DDR_DQS7
DDR_CK0# DDR_CK0
DDR_CK1# DDR_CK1
DDR_CK2# DDR_CK2
DDR_CK3# DDR_CK3
DDR_CK4# DDR_CK4
DDR_CK5# DDR_CK5
DDR_CS0# DDR_CS1# DDR_CS2# DDR_CS3#
TESTMODE
DDR_DQ0 DDR_DQ1 DDR_DQ2 DDR_DQ3 DDR_DQ4 DDR_DQ5 DDR_DQ6 DDR_DQ7 DDR_DQ8 DDR_DQ9 DDR_DQ10 DDR_DQ11 DDR_DQ12 DDR_DQ13 DDR_DQ14 DDR_DQ15 DDR_DQ16 DDR_DQ17 DDR_DQ18 DDR_DQ19 DDR_DQ20 DDR_DQ21 DDR_DQ22 DDR_DQ23 DDR_DQ24 DDR_DQ25 DDR_DQ26 DDR_DQ27 DDR_DQ28 DDR_DQ29 DDR_DQ30 DDR_DQ31 DDR_DQ32 DDR_DQ33 DDR_DQ34 DDR_DQ35 DDR_DQ36 DDR_DQ37 DDR_DQ38 DDR_DQ39 DDR_DQ40 DDR_DQ41 DDR_DQ42 DDR_DQ43 DDR_DQ44 DDR_DQ45 DDR_DQ46 DDR_DQ47 DDR_DQ48 DDR_DQ49 DDR_DQ50 DDR_DQ51 DDR_DQ52 DDR_DQ53 DDR_DQ54 DDR_DQ55 DDR_DQ56 DDR_DQ57 DDR_DQ58 DDR_DQ59 DDR_DQ60 DDR_DQ61 DDR_DQ62 DDR_DQ63
VDRM
DDR_VREF
RMDQM0 R50 22 MDQM0
RMDQM1 R51 22 MDQM1
RMDQM2 R52 22 MDQM2
RMDQM3 R53 22 MDQM3
RMDQM4 R54 22 MDQM4
RMDQM5 R55 22 MDQM5
RMDQM6 R56 22 MDQM6
RMDQM7 R57 22 MDQM7
RMDQS0 R58 22 MDQS0
RMDQS1 R59 22 MDQS1
RMDQS2 R60 22 MDQS2
RMDQS3 R61 22 MDQS3
RMDQS4 R62 22 MDQS4
RMDQS5 R63 22 MDQS5
RMDQS6 R64 22 MDQS6
RMDQS7 R65 22 MDQS7
10,11 -MSRAS
10,11 -MSCAS
10,11 -MWE
10,11 MCKE
RMCLK0- RMCLK0+ RMCLK1- RMCLK1+ RMCLK2- RMCLK2+ RMCLK3- RMCLK3+ RMCLK4- RMCLK4+ RMCLK5- RMCLK5+
10,11 MCLK0- 10,11 MCLK0+ 10,11 MCLK1- 10,11 MCLK1+ 10,11 MCLK2- 10,11 MCLK2+ 10,11 MCLK3- 10,11 MCLK3+ 10,11 MCLK4- 10,11 MCLK4+ 10,11 MCLK5- 10,11 MCLK5+
R66 R67 R68 R69 R70 R71 R72 R73 R74 R75 R76 R77 *0
10,11 -MCS0 10,11 -MCS1 10,11 -MCS2 10,11 -MCS3
2.5VSUS
C92 0.1U
C93 1U/10V/Y5V
C94 0.1U
MVREF_DIM 11
RP15 RP13 RP17 RP11 RP20 RP19 RP18 RP21 RP9 RP16 RP7 RP14 RP12 RP8 RP10 RP6
RMD0 RMD1 RMD2 RMD3 RMD4 RMD5 RMD6 RMD7 RMD8 RMD9 RMD10 RMD11 RMD12 RMD13 RMD14 RMD15 RMD16 RMD17 RMD18 RMD19 RMD20 RMD21 RMD22 RMD23 RMD24 RMD25 RMD26 RMD27 RMD28 RMD29 RMD30 RMD31 RMD32 RMD33 RMD34 RMD35 RMD36 RMD37 RMD38 RMD39 RMD40 RMD41 RMD42 RMD43 RMD44 RMD45 RMD46 RMD47 RMD48 RMD49 RMD50 RMD51 RMD52 RMD53 RMD54 RMD55 RMD56 RMD57 RMD58 RMD59 RMD60 RMD61 RMD62 RMD63
MD0 MD1 MD2 MD3 MD4 MD5 MD6 MD7 MD8 MD9 MD10 MD11 MD12 MD13 MD14 MD15 MD16 MD17 MD18 MD19 MD20 MD21 MD22 MD23 MD24 MD25 MD26 MD27 MD28 MD29 MD30 MD31 MD32 MD33 MD34 MD35 MD36 MD37 MD38 MD39 MD40 MD41 MD42 MD43 MD44 MD45 MD46 MD47 MD48 MD49 MD50 MD51 MD52 MD53 MD54 MD55 MD56 MD57 MD58 MD59 MD60 MD61 MD62 MD63
22X4



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QUANTA COMPUTER

Title	RS200M 2/4	
Size B	Document Number JE5.1 Main Board	Rev 1A
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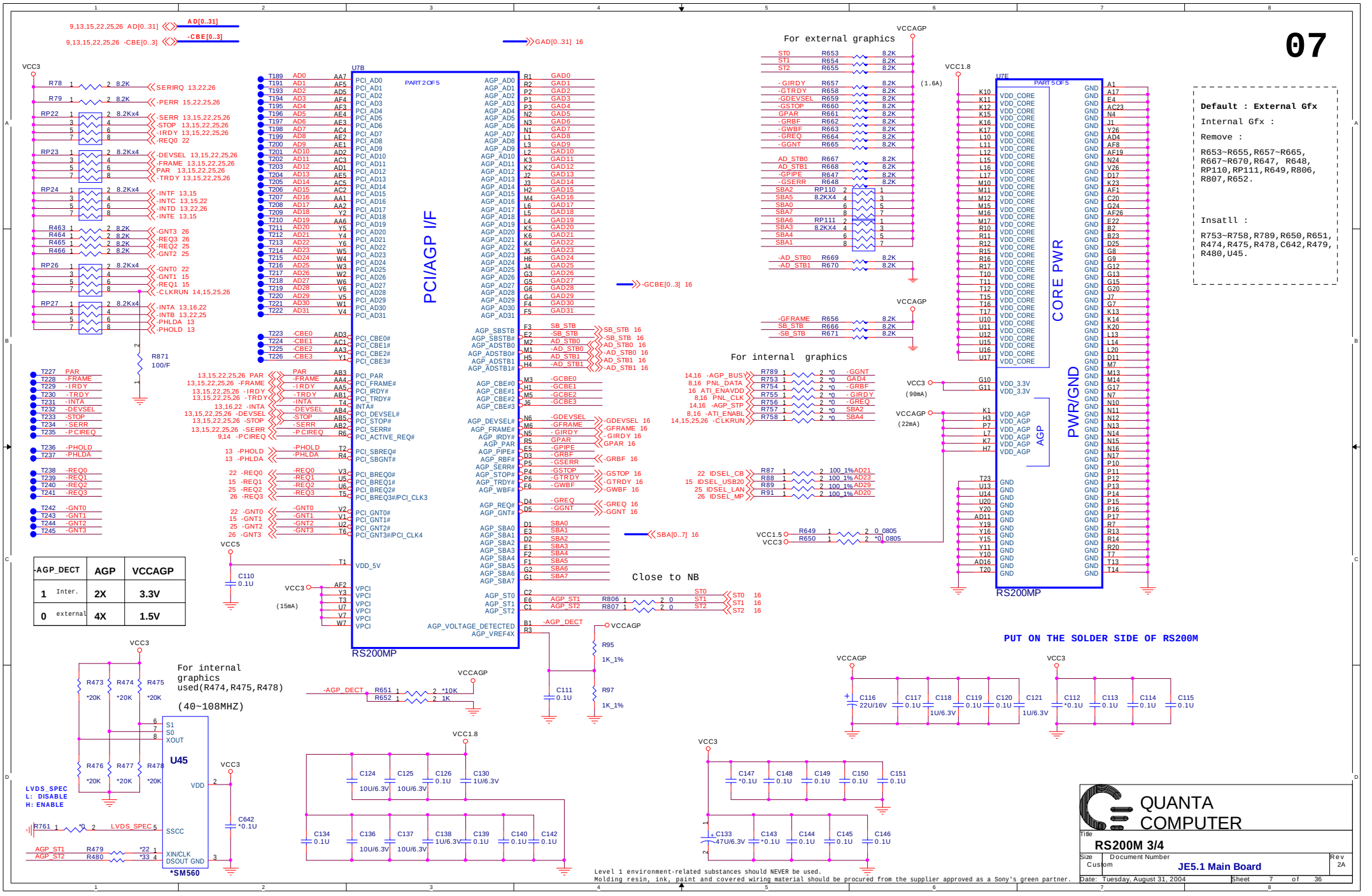
07
PCI/AGP I/F
RS200MP
CORE PWR
PWR/GND
AGP
For external graphics
For internal graphics
For internal graphics used(R474,R475,R478) (40~108MHZ)
Close to NB
PUT ON THE SOLDER SIDE OF RS200M
Default : External Gfx
Internal Gfx :
Remove :
R653~R655,R657~R665, R667~R670,R647, R648, RP110,RP111,R649,R806, R807,R652.
Insatll :
R753~R758,R789,R650,R651, R474,R475,R478,C642,R479, R480,U45.
-AGP_DECT | AGP | VCCAGP
1 Inter. | 2X | 3.3V
0 external | 4X | 1.5V
LVDS_SPEC L: DISABLE H: ENABLE
*SM560
QUANTA COMPUTER
RS200M 3/4
JE5.1 Main Board
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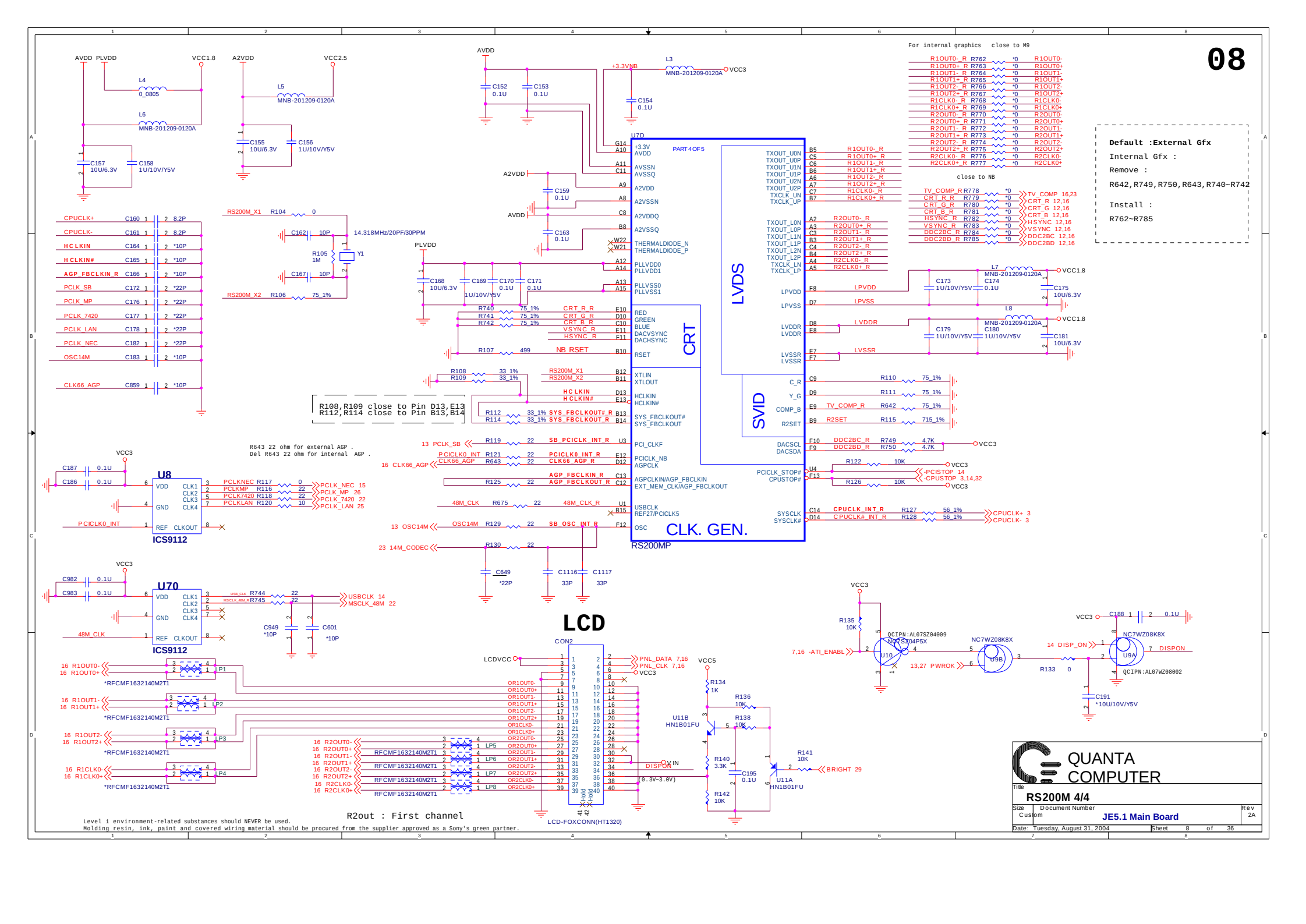
LCD


AVDD PLVDD
VCC1.8
A2VDD
VCC2.5
L4
0_0805
L5
MNB-201209-0120A
L6
MNB-201209-0120A
C155 10U/6.3V
C156 1U/10V/Y5V
C157 10U/6.3V
C158 1U/10V/Y5V
AVDD
C152 0.1U
C153 0.1U
+3.3VNB
L3
MNB-201209-0120A
VCC3
C154 0.1U
U7D
PART 4 OF 5
+3.3V AVDD
AVSSN AVSSQ
A2VDD
A2VSSN
A2VDDQ
A2VSSQ
THERMALDIODE_N THERMALDIODE_P
PLLVDD0 PLLVDD1
PLLVSS0 PLLVSS1
CRT
RED GREEN BLUE DACVSYNC DACHSYNC
RSET
XTLIN XTLOUT
HCLKIN HCLKIN#
SYS_FBCLKOUT# SYS_FBCLKOUT
PCI_CLKF
PCICLK_NB AGPCLK
AGPCLKIN/AGP_FBCLKIN EXT_MEM_CLK/AGP_FBCLKOUT
USBCLK REF27/PCICLK5
OSC
CLK. GEN.
RS200MP
LVDS
TXOUT_U0N TXOUT_U0P TXOUT_U1N TXOUT_U1P TXOUT_U2N TXOUT_U2P TXCLK_UN TXCLK_UP
TXOUT_L0N TXOUT_L0P TXOUT_L1N TXOUT_L1P TXOUT_L2N TXOUT_L2P TXCLK_LN TXCLK_LP
LPVDD LPVSS
LVDDR LVDDR
LVSSR LVSSR
SVID
C_R Y_G COMP_B R2SET
DACSCL DACSDA
PCICLK_STOP# CPUSTOP#
SYSCLK SYSCLK#
For internal graphics close to M9
R1OUT0- R762 *0 R1OUT0-
R1OUT0+ R763 *0 R1OUT0+
R1OUT1- R764 *0 R1OUT1-
R1OUT1+ R765 *0 R1OUT1+
R1OUT2- R766 *0 R1OUT2-
R1OUT2+ R767 *0 R1OUT2+
R1CLK0- R768 *0 R1CLK0-
R1CLK0+ R769 *0 R1CLK0+
R2OUT0- R770 *0 R2OUT0-
R2OUT0+ R771 *0 R2OUT0+
R2OUT1- R772 *0 R2OUT1-
R2OUT1+ R773 *0 R2OUT1+
R2OUT2- R774 *0 R2OUT2-
R2OUT2+ R775 *0 R2OUT2+
R2CLK0- R776 *0 R2CLK0-
R2CLK0+ R777 *0 R2CLK0+
close to NB
TV_COMP R778 *0 TV_COMP 16,23
CRT_R R779 *0 CRT_R 12,16
CRT_G R780 *0 CRT_G 12,16
CRT_B R781 *0 CRT_B 12,16
HSYNC_R R782 *0 HSYNC 12,16
VSYNC_R R783 *0 VSYNC 12,16
DDC2BC_R R784 *0 DDC2BC 12,16
DDC2BD_R R785 *0 DDC2BD 12,16
Default :External Gfx
Internal Gfx :
Remove :
R642,R749,R750,R643,R740~R742
Install :
R762~R785
L7
MNB-201209-0120A
C173 1U/10V/Y5V
C174 0.1U
C175 10U/6.3V
VCC1.8
L8
MNB-201209-0120A
C179 1U/10V/Y5V
C180 1U/10V/Y5V
C181 10U/6.3V
VCC1.8
LVDDR
LVSSR
R110 75_1%
R111 75_1%
R642 75_1%
R115 715_1%
DDC2BC_R R749 4.7K
DDC2BD_R R750 4.7K
VCC3
R122 10K
VCC3
-PCISTOP 14
-CPUSTOP 3,14,32
R126 10K
VCC3
CPUCLK_INT_R R127 56_1%
CPUCLK#_INT_R R128 56_1%
CPUCLK+ 3
CPUCLK- 3
CPUCLK+ C160 8.2P
CPUCLK- C161 8.2P
HCLKIN C164 *10P
HCLKIN# C165 *10P
AGP_FBCLKIN_R C166 *22P
PCLK_SB C172 *22P
PCLK_MP C176 *22P
PCLK_7420 C177 *22P
PCLK_LAN C178 *22P
PCLK_NEC C182 *22P
OSC14M C183 *10P
CLK66_AGP C859 *10P
RS200M_X1 R104 0
C162 10P
14.318MHz/20PF/30PPM
R105 1M
Y1
C167 10P
RS200M_X2 R106 75_1%
PLVDD
C168 10U/6.3V
C169 1U/10V/Y5V
C170 0.1U
C171 0.1U
R740 75_1% CRT_R_R
R741 75_1% CRT_G_R
R742 75_1% CRT_B_R
VSYNC_R
HSYNC_R
R107 499 NB_RSET
R108 33_1%
R109 33_1%
RS200M_X1
RS200M_X2
HCLKIN
HCLKIN#
R108,R109 close to Pin D13,E13
R112,R114 close to Pin B13,B14
R112 33_1% SYS_FBCLKOUT#_R
R114 33_1% SYS_FBCLKOUT_R
R643 22 ohm for external AGP .
Del R643 22 ohm for internal AGP .
13 PCLK_SB
R119 22 SB_PCICLK_INT_R
PCICLK0_INT R121 22 PCICLK0_INT_R
16 CLK66_AGP
CLK66_AGP R643 22 CLK66_AGP_R
AGP_FBCLKIN_R
R125 22 AGP_FBCLKOUT_R
48M_CLK R675 22 48M_CLK_R
13 OSC14M
OSC14M R129 22 SB_OSC_INT_R
23 14M_CODEC
R130 22
C649 *22P
C1116 33P
C1117 33P
U8
VDD GND
CLK1 CLK2 CLK3 CLK4
REF CLKOUT
ICS9112
C187 0.1U
C186 0.1U
PCICLK0_INT
PCLKNEC R117 0 PCLK_NEC 15
PCLKMP R116 22 PCLK_MP 26
PCLK7420 R118 22 PCLK_7420 22
PCLKLAN R120 10 PCLK_LAN 25
U70
VDD GND
CLK1 CLK2 CLK3 CLK4
REF CLKOUT
ICS9112
C982 0.1U
C983 0.1U
48M_CLK
USB_CLK R744 22 USBCLK 14
MSCLK_48M R745 22 MSCLK_48M 22
C949 *10P
C601 *10P
16 R1OUT0-
16 R1OUT0+
*RFCMF1632140M2T1
LP1
16 R1OUT1-
16 R1OUT1+
LP2
16 R1OUT2-
16 R1OUT2+
LP3
16 R1CLK0-
16 R1CLK0+
LP4
16 R2OUT0-
16 R2OUT0+
16 R2OUT1-
16 R2OUT1+
16 R2OUT2-
16 R2OUT2+
16 R2CLK0-
16 R2CLK0+
LP5
LP6
LP7
LP8
LCDVCC
CON2
PNL_DATA 7,16
PNL_CLK 7,16
VCC3
OR1OUT0- OR1OUT0+ OR1OUT1- OR1OUT1+ OR1OUT2- OR1OUT2+ OR1CLK0- OR1CLK0+ OR2OUT0- OR2OUT0+ OR2OUT1- OR2OUT1+ OR2OUT2- OR2OUT2+ OR2CLK0- OR2CLK0+
Hold Hold
LCD-FOXCONN(HT1320)
VCC5
R134 1K
R136 10K
R138 10K
U11B HN1B01FU
R140 3.3K
C195 0.1U
R142 10K
U11A HN1B01FU
R141 10K
BRIGHT 29
DISPON
VIN
(0.3V~3.6V)
R2out : First channel
VCC3
R135 10K
7,16 -ATI_ENABL
QCIPN:AL07SZ04009
NC7SZ04P5X
U10
13,27 PWROK
NC7WZ08K8X
U9B
R133 0
14 DISP_ON
NC7WZ08K8X
U9A
DISPON
QCIPN:AL07WZ08002
C188 0.1U
C191 *10U/10V/Y5V
Level 1 environment-related substances should NEVER be used.
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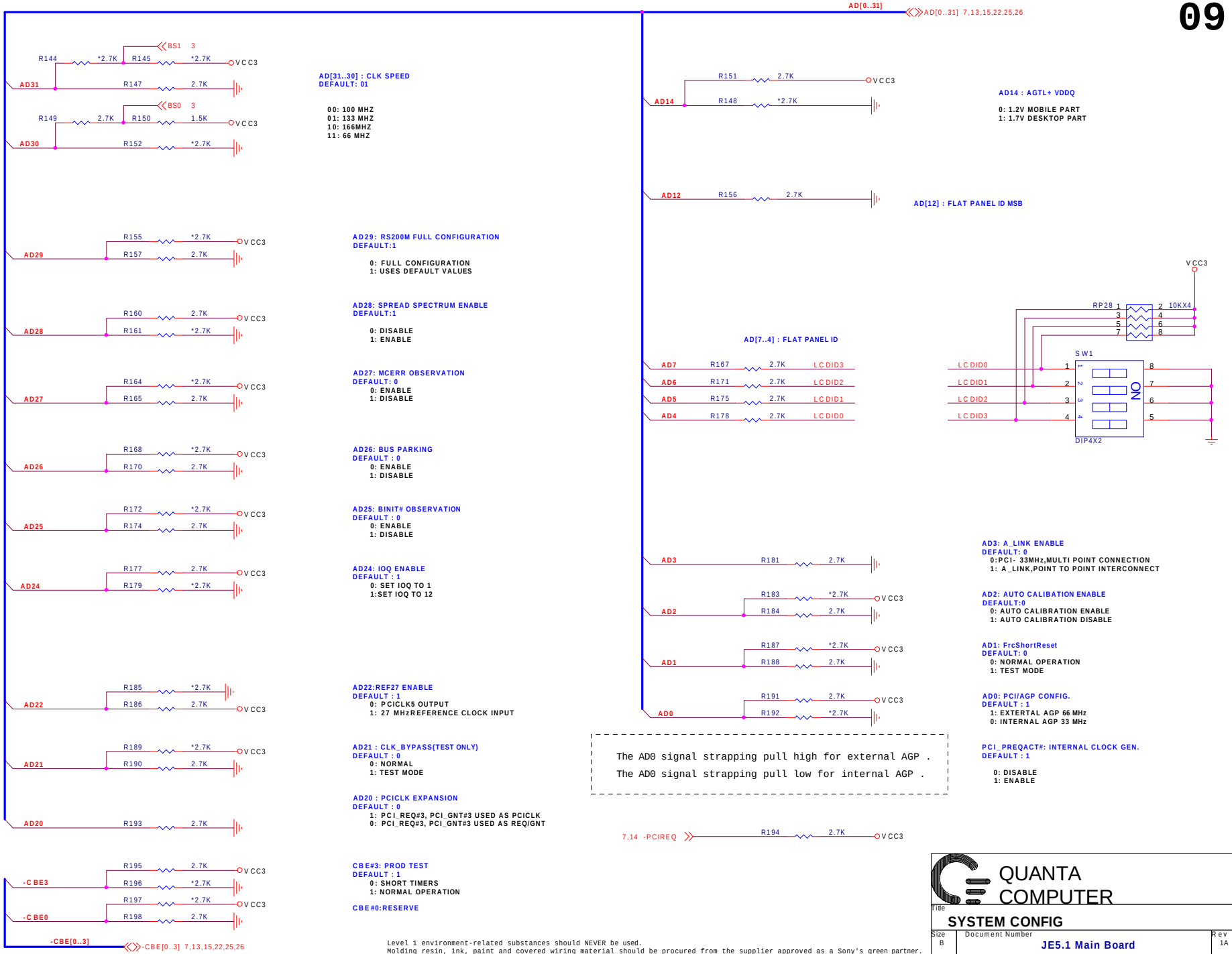
QUANTA COMPUTER
Title
RS200M 4/4
Size Custom
Document Number
JE5.1 Main Board
Rev 2A
Date: Tuesday, August 31, 2004
Sheet 8 of 36



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QUANTA COMPUTER

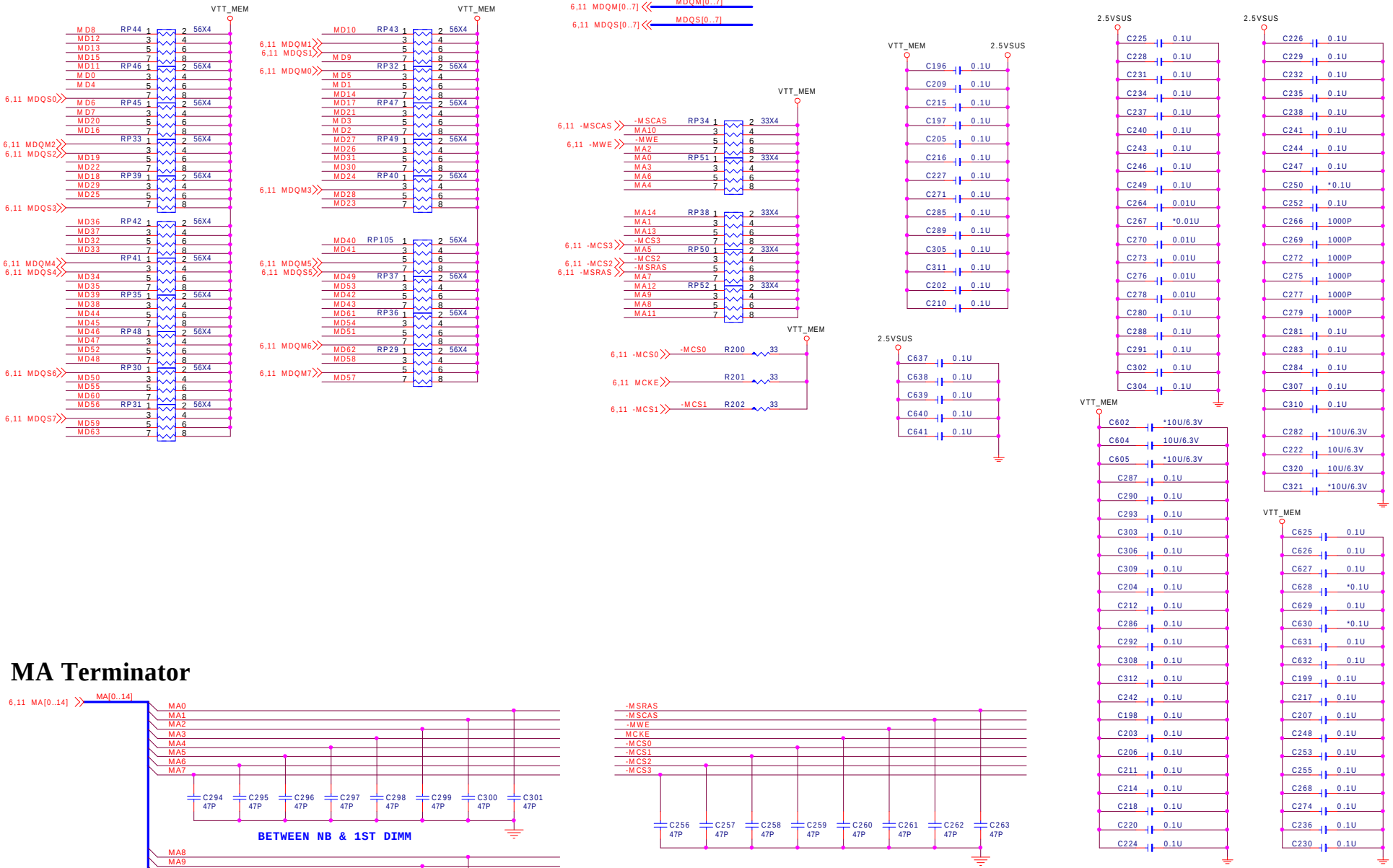
Title: SYSTEM CONFIG

Size: B | Document Number: JE5.1 Main Board | Rev: 1A

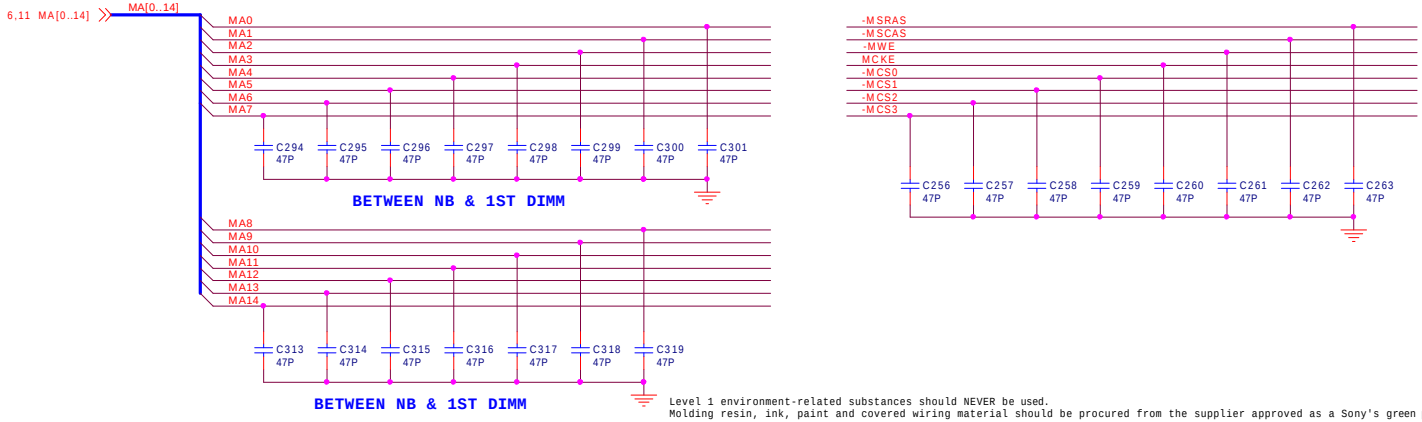
Date: Tuesday, August 31, 2004 | Sheet 9 of 36

DDR TERMINATOR

10



MA Terminator



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QUANTA COMPUTER

Title: Memory -1/2- Terminator		
Size: B	Document Number: JE5.1 Main Board	Rev: 1A
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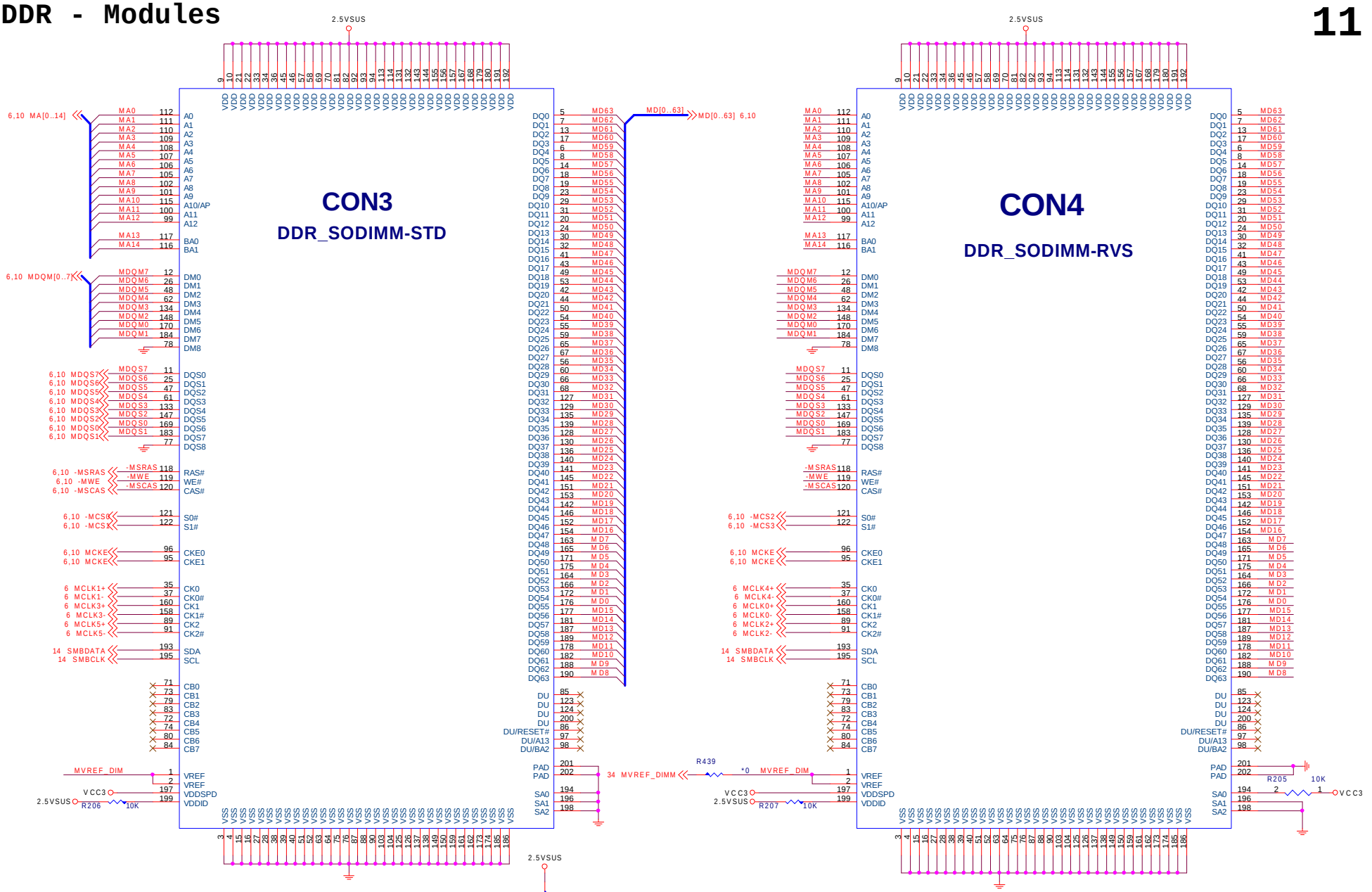
DDR - Modules



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QUANTA COMPUTER

Title: Memory -2/2- SODIMM

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B	JE5.1 Main Board	1A

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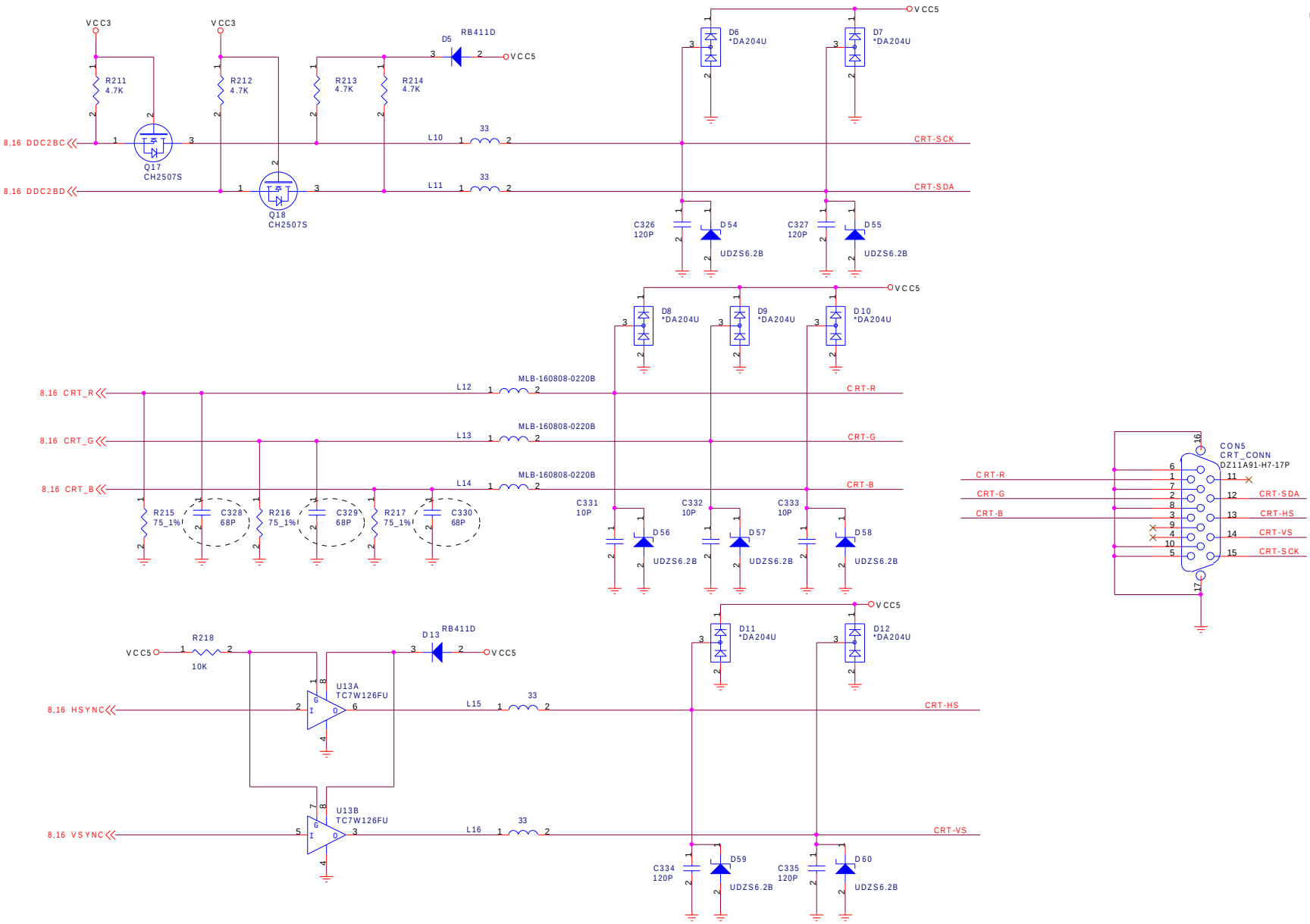

Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title	CRT PORT/TV	
Size B	Document Number JE5.1 Main Board	Rev 1A
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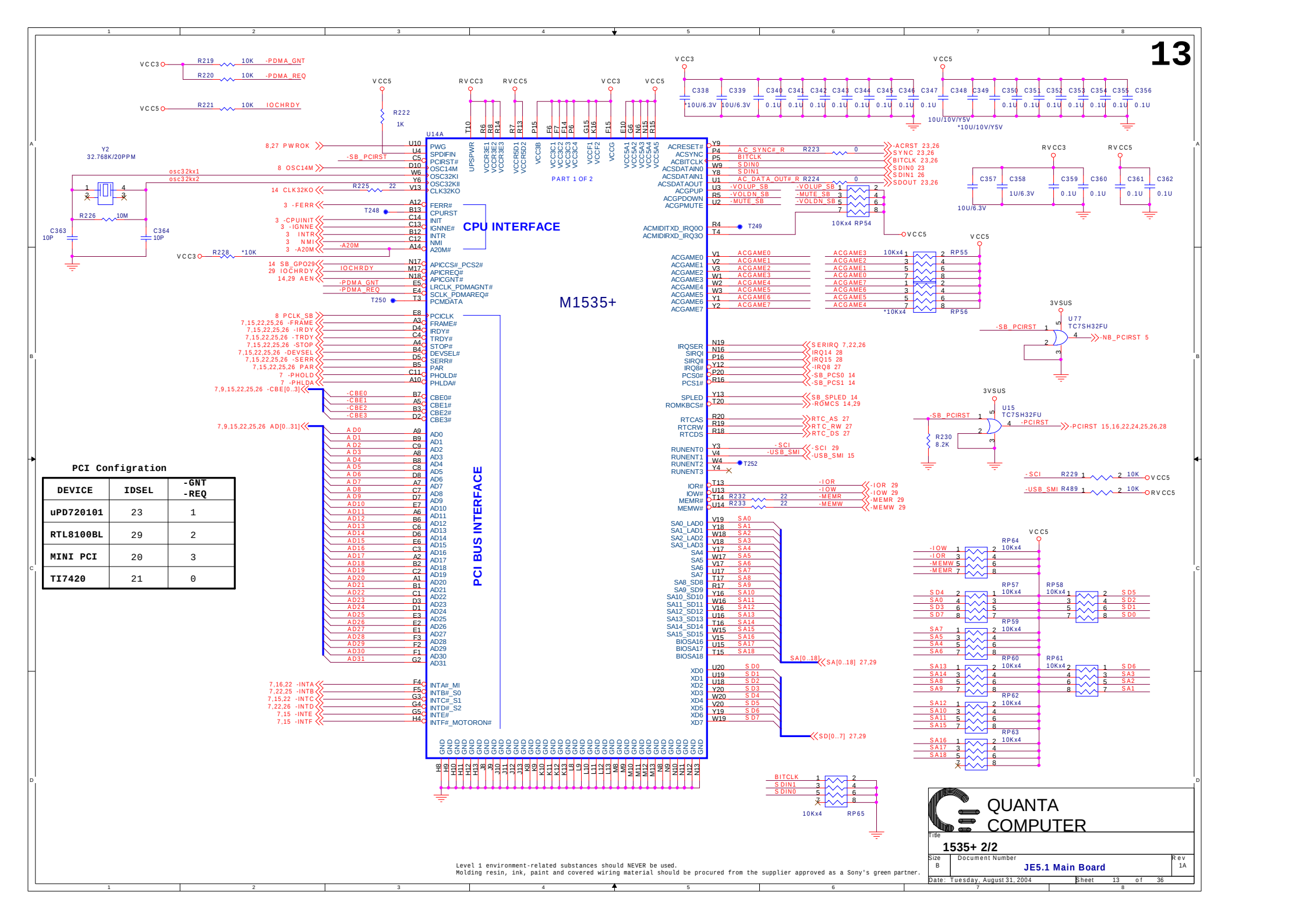
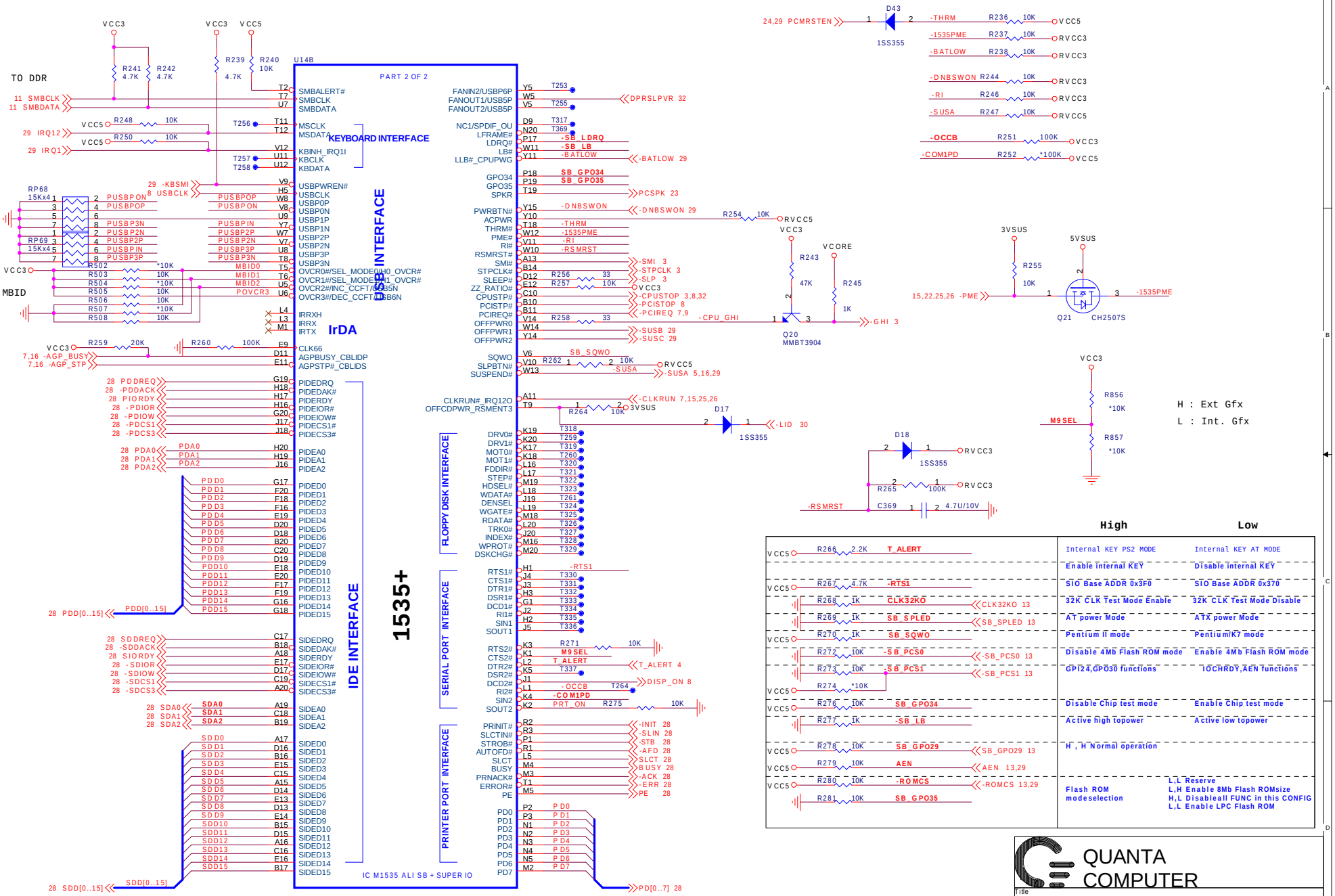

M1535+
PART 1 OF 2
CPU INTERFACE
PCI BUS INTERFACE
U14A
PCI Configration
DEVICE | IDSEL | -GNT -REQ
uPD720101 | 23 | 1
RTL8100BL | 29 | 2
MINI PCI | 20 | 3
TI7420 | 21 | 0
QUANTA COMPUTER
Title
1535+ 2/2
Size B
Document Number
JE5.1 Main Board
Rev 1A
Date: Tuesday, August 31, 2004
Sheet 13 of 36
Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.



Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title	1535+ 2/2	
Size B	Document Number JE5.1 Main Board	Rev 1A
Date: Tuesday, August 31, 2004	Sheet 14 of 36	

USB 2.0 CONTROLLER
uPD720101F1-EA8
FBGA144

For Analog PLL power

The chip is power swith for USB power .

Title	USB Controller NEC-uPD720101
Size	Custom
Document Number	JE5.1 Main Board
Rev	3A
Date	Tuesday, August 31, 2004
Sheet	15 of 36

Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

U49A — Part 1 of 6

PCI / AGP
DVO / EXT TMDS / GPIO
AGP2X
LVDS
AGP 4X
AGP 8X
TMDS
DAC2
CLK SS
DAC1
PWR MAN
THERM

R808 select VRAM :
H : 64M
L : 32M

R809 select Vendor :
L : SAMSUNG
H : Hynix VRAM

RP109 10KX4
VGA_GPIO0
VGA_GPIO1
VGA_GPIO3
VGA_GPIO2
ZV_LCDDATA20 R858 10K VCC3

Default : External Gfx

Internal Gfx :

Remove all components
Except for
U71,C977,R743,C978,C979,C980,
R801,R802

VCC1.5
C696 *0.1U
C699 0.1U
R569 1K_1%
R573 1K_1%
AGPVREF

R593 1M
XTALIN
XTALOUT
C808 15P
Y10 27MHZ(TXC) 20pF/13ppm
C809 15P

close to M9

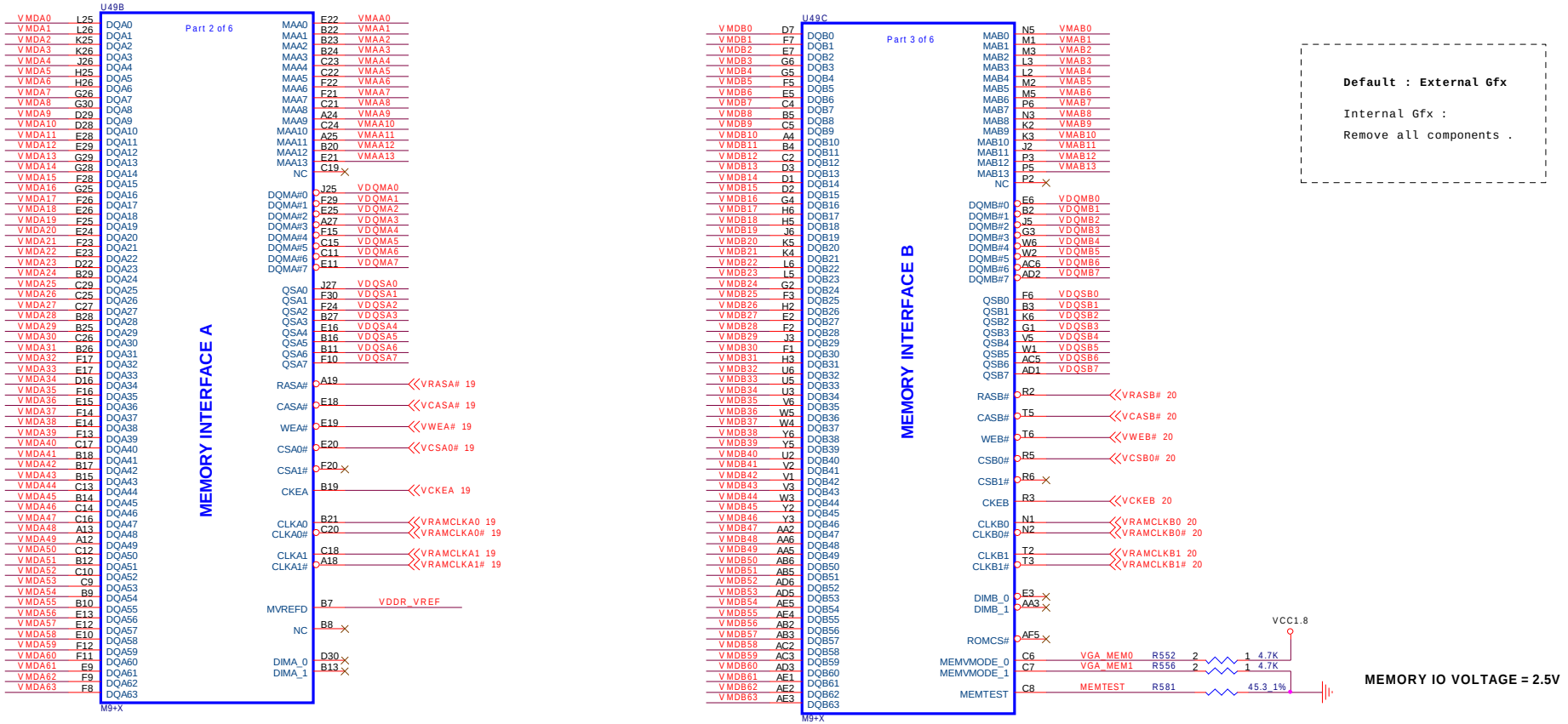
VCC3
R751 10K
5,14,29 -SUSA
-SUSA_M9
Q42 CH2507S

U71 AAT4280IGU-3-T1 ANALOGE
C977 0.1U
7 ATI_ENAVDD
R743 10K
C978 C979 C980 C981
0.1U 0.1U 4.7U/10V/Y5V
LCDVCC(2.3A)

Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

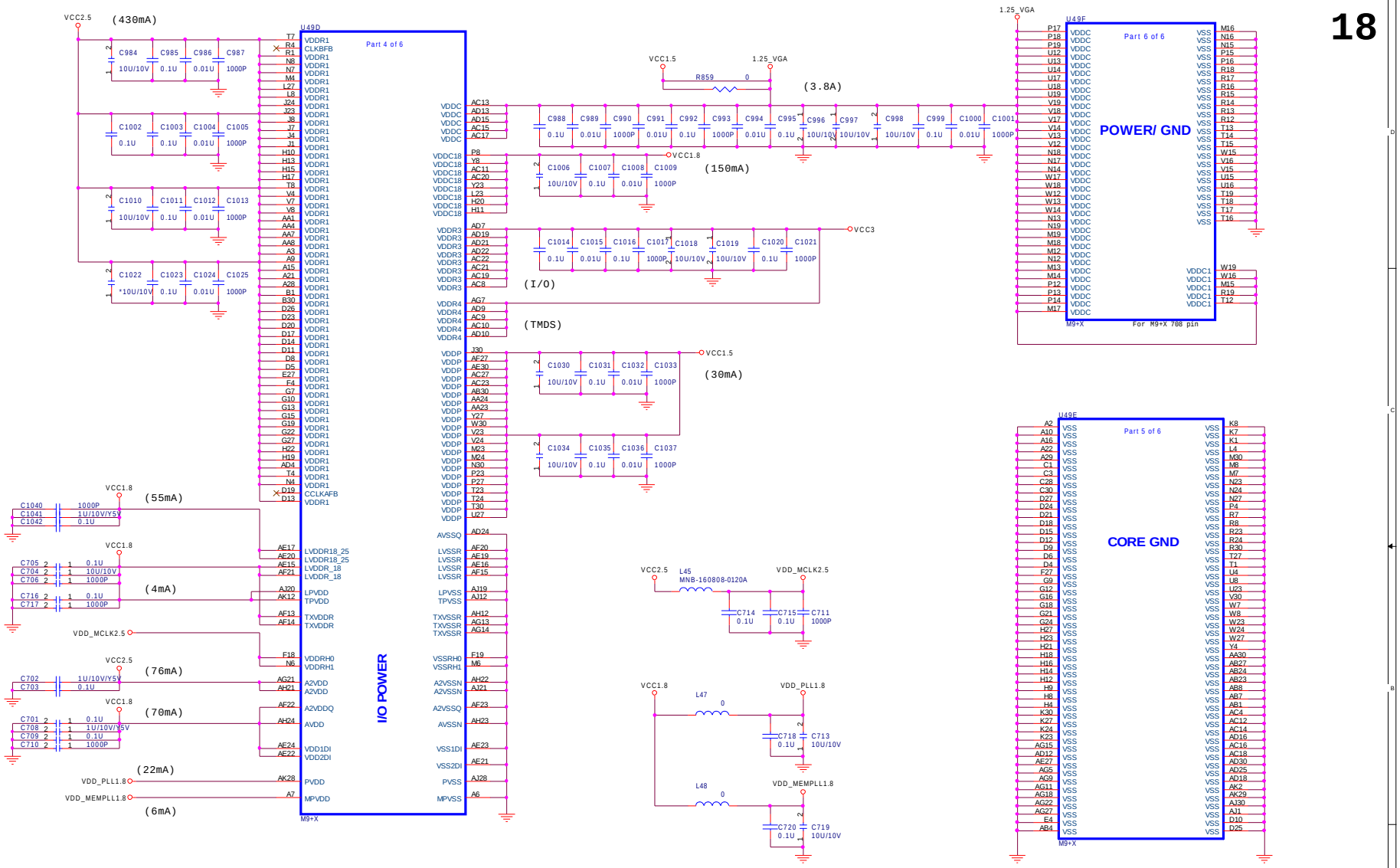
Title	ATI M9+X	
Size: Custom	Document Number: JE5.1 Main Board	Rev: 2A
Date: Tuesday, August 31, 2004	Sheet 16 of 36	



Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title: ATI M9+X		
Size: Custom	Document Number: JE5.1 Main Board	Rev: 1A
Date: Tuesday, August 31, 2004	Sheet 17 of 36	



Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title	ATI M9+X	
Size: Custom	Document Number: JE5.1 Main Board	Rev: 3A
Date: Tuesday, August 31, 2004	Sheet 18 of 36	

VMDA[0..63] 17
VMAA[0..13] 17
VDQMA[0..7] 17
VDQSA[0..7] 17

VCC2.5

U59

DDR4MX32-BGA

U58

DDR4MX32-BGA

Samsung K4D263238E-VC33
(Hynix -HY5DU28322AF(P))

Samsung K4D263238E-VC33
(Hynix -HY5DU28322AF(P))

R681 0

R682 0

C863 0.1U
C864 0.1U
C865 0.1U
C866 0.1U
C867 0.1U
C873 0.1U
C874 0.01U
C875 0.01U
C876 1000P
C877 1000P

C868 0.1U
C869 0.1U
C870 0.1U
C871 0.1U
C872 0.1U
C878 0.1U
C879 0.01U
C880 0.01U
C881 1000P
C882 1000P

R677 1K_1%
R679 1K_1%
C883 0.1U
VRAMREFA1

R678 1K_1%
R680 1K_1%
C884 0.1U
VRAMREFA2

Default : External Gfx

Internal Gfx :

Remove all components .

Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title: **VGA DDR VRAMx2 1/2**

Size: Custom | Document Number: **JE5.1 Main Board** | Rev: 1A

Date: Tuesday, August 31, 2004 | Sheet 19 of 36

If 32M VRAM of M9+X only install
U67,U68

VMDB[0..63] 17
VMAB[0..13] 17
VDQMB[0..7] 17
VDQSB[0..7] 17

Default : External Gfx

Internal Gfx :
Remove all components .

U67

DDR4MX32-BGA

Samsung K4D263238E-VC33
(Hynix -HY5DU28322AF(P))

U68

DDR4MX32-BGA

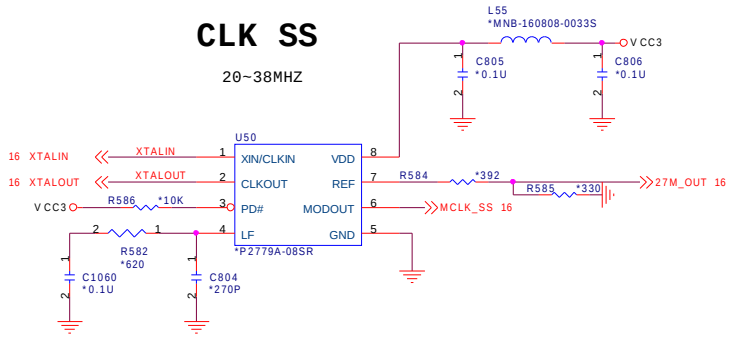
Samsung K4D263238E-VC33
(Hynix -HY5DU28322AF(P))

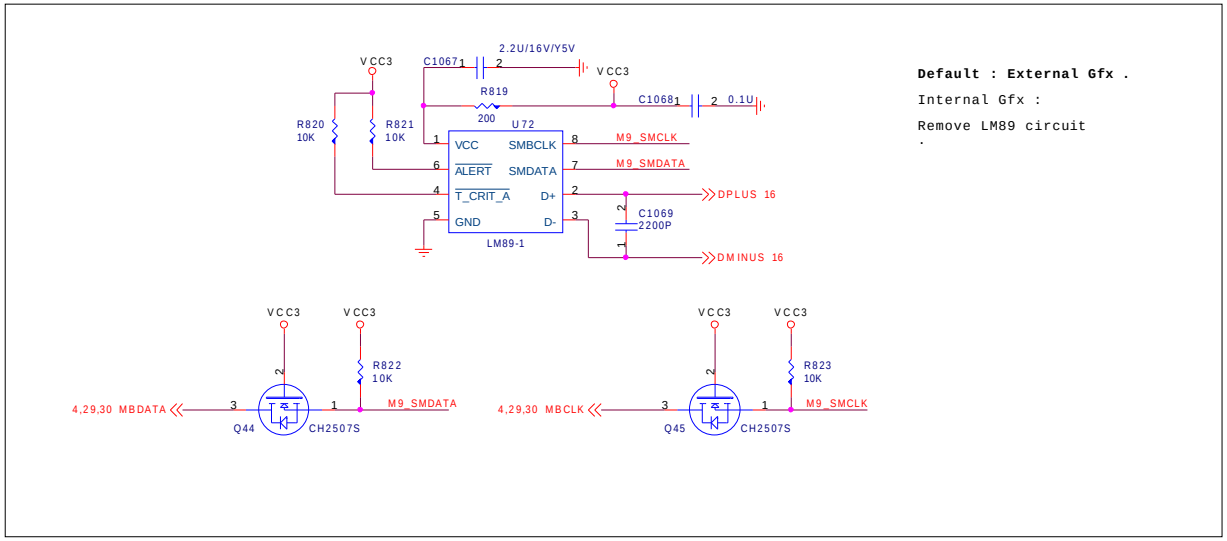
Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title	VGA DDR VRAMx2 2/2	
Size: Custom	Document Number: JE5.1 Main Board	Rev: 1A
Date: Tuesday, August 31, 2004	Sheet 20 of 36	

MCLK (230MHZ) SPREAD SPECTRUM LOGIC





Default : External Gfx .

Internal Gfx :

Remove LM89 circuit

.

Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title: AGP SSC		
Size: Custom	Document Number: JE5.1 Main Board	Rev: 1A
Date: Tuesday, August 31, 2004	Sheet 21 of 36	

U53A

PCI/1394/MS PORTION

PCI7420B

3VSUS

1394_3V

7,9,13,15,25,26 AD[0..31]

C813 0.01U, C814 0.01U, C815 0.01U, C816 0.01U

C821 0.1U, C822 0.1U, C823 1000P, C824 1000P

R824 1K, D47 *RSB6.8S

TPBIAS0, TPB0#, TPB0, TPA0#, TPA0, TPBIAS1, TPA1, TPA1#

LP12 *RFCMF1632140M2T1

LP13 *RFCMF1632140M2T1

CON34 1394-MOLEX(54516-0492)

R603 56.2_1% TPA0
R604 56.2_1% TPA0#
C811 220P
C812 1U/10V/Y5V

R605 56.2_1% TPB0
R606 56.2_1% TPB0#
R607 5.11K_1%
C817 220P

Y11 24.576M/12pF/30ppm(TXC)
1394_XO, 1394_XI
C818 12P, C819 12P

T309, T310, T311

R608 1K CPS

R609 220, R610 220, R611 220 TEST0(PC0), TEST1(PC1), TEST2(PC2)

C820 0.1U FIL0, FIL1

1394_XO, 1394_XI

R612 10K

SUSPEND# -SUSPEND 29

RI_OUT#/PME# -PME 14,15,25,26

SPKROUT# R613 43K -PCICSPK 23

CNA R616 4.7K

R617 2.7K, R618 2.7K

U54 NM24C02UFLEMT8

R619 6.34K_1% R0, R1

1394SCL, 1394SDA

PHY_TEST_MA R621 4.7K

VDPLL L56 MNB-201209-0030P

C825 0.1U, C826 0.01U, C827 0.1U

VSPLL

DATA, CLOCK, LATCH
CB_DATA 24, CB_CLOCK 24, CB_LATCH 24

R623 47K

MFUNC0 -INTA 7,13,16
MFUNC1 -INTB 7,13,25
MFUNC2 -INTC 7,13,15
MFUNC3 SERIRQ 7,13,26
MFUNC4 -INTD 7,13,26
MFUNC5, MFUNC6

R626 43K, R627 43K

CLK48 MSCLK_48M 8

VR_EN#

VR_PORT

C832 0.01U, C833 0.1U

MC_PWR_CTRL_1 MC_PWR 23
MS_BS MS_BS 23
MS_DATA1 MS_DATA1 23
MS_SDIO(DATA0) MS_SDIO 23
MS_DATA2 MS_DATA2 23
MC_CD_1# MC_CD# 23
MS_DATA3 MS_DATA3 23
MS_CLK

R630 220 MS_LED MS_LED 23

MC_PWR_CTRL_0
SD_DAT3, SD_DAT2, SD_DAT1, SD_DAT0, SD_CMD, SD_CLK, SD_WP#

R850 0 MS_CLK_R MS_CLK MS_CLK 23

C1097 *10P

C_BE3#, C_BE2#, C_BE1#, C_BE0#
7,9,13,15,25,26 -CBE3
7,13,15,25,26 -CBE2
7,13,15,25,26 -CBE1
7,9,13,15,25,26 -CBE0

PAR, IDSEL, REQ#, GNT#, FRAME#, IRDY#, TRDY#, DEVSEL#, STOP#, PERR#, SERR#
7,13,15,25,26 PAR
7 IDSEL_CB
7 -REQ0
7 -GNT0
7,13,15,25,26 -FRAME
7,13,15,25,26 -IRDY
7,13,15,25,26 -TRDY
7,13,15,25,26 -DEVSEL
7,13,15,25,26 -STOP
7,15,25,26 -PERR
7,13,15,25,26 -SERR

PCICLK
8 PCLK_7420

PRST#
15,24 -SUSRST
13,15,16,24,25,26,28 -PCIRST
R851 *0, R852 0

GRST#
-GRST
R622 47K, C828 0.1U

GND1, GND2, GND3, GND4, GND5, GND6, GND7, GND8, GND9, GND10, GND11, GND12, GND13, GND14, GND15, GND16, GND17, GND18, GND19

AGN2, AGN3, AGN4

NC, RSVD

U76 *TPS3809K33
C1108 *0.1U
~200ms~

L57 MNB-201209-0030P

C834 1000P, C835 0.01U, C836 0.01U, C837 4.7U/10V/Y5V

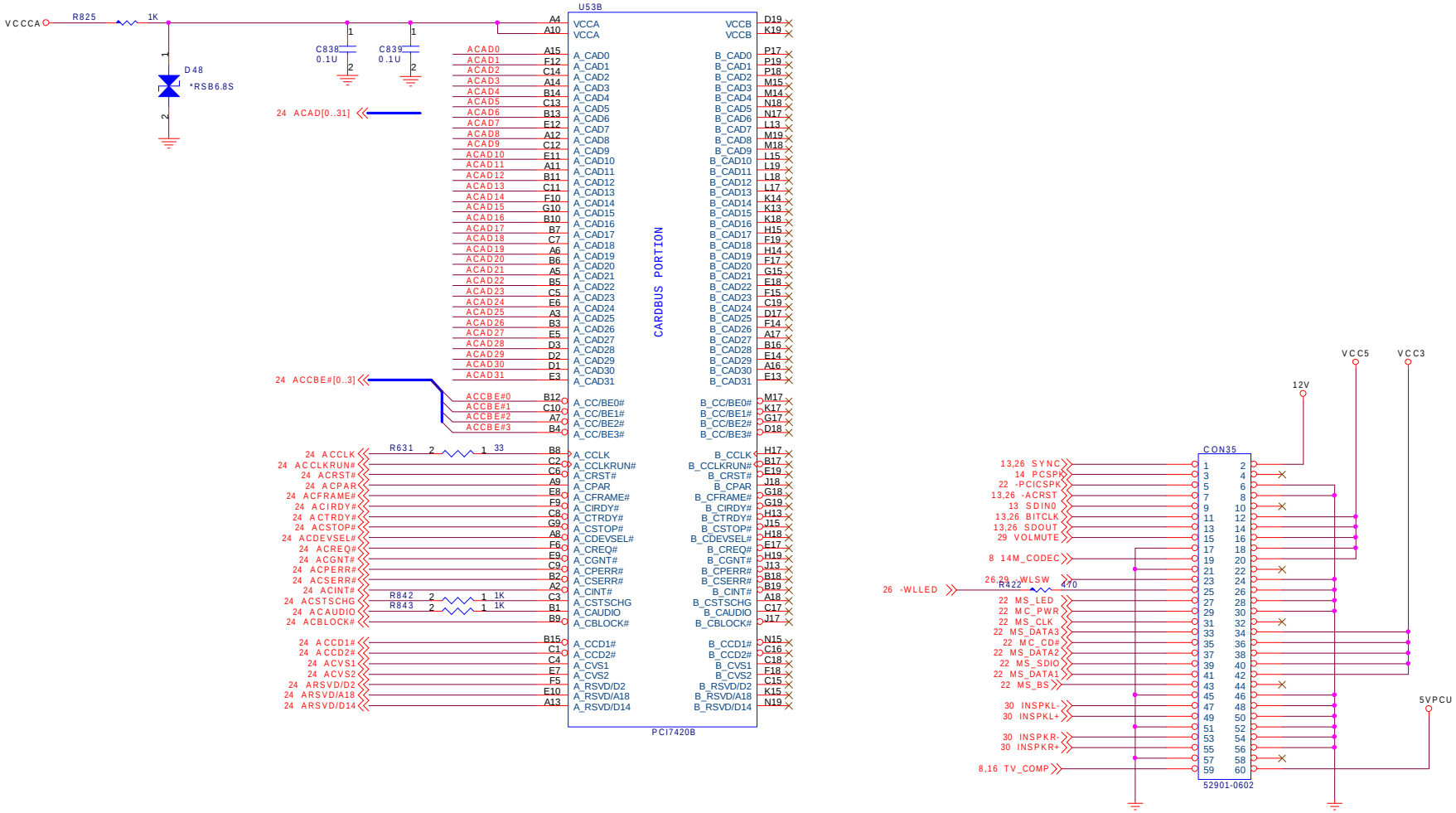
Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title: TI7420-A (CARDBUS+1394+MS)

Size: B | Document Number: JE5.1 Main Board | Rev: 1A

Date: Tuesday, August 31, 2004 | Sheet 22 of 36

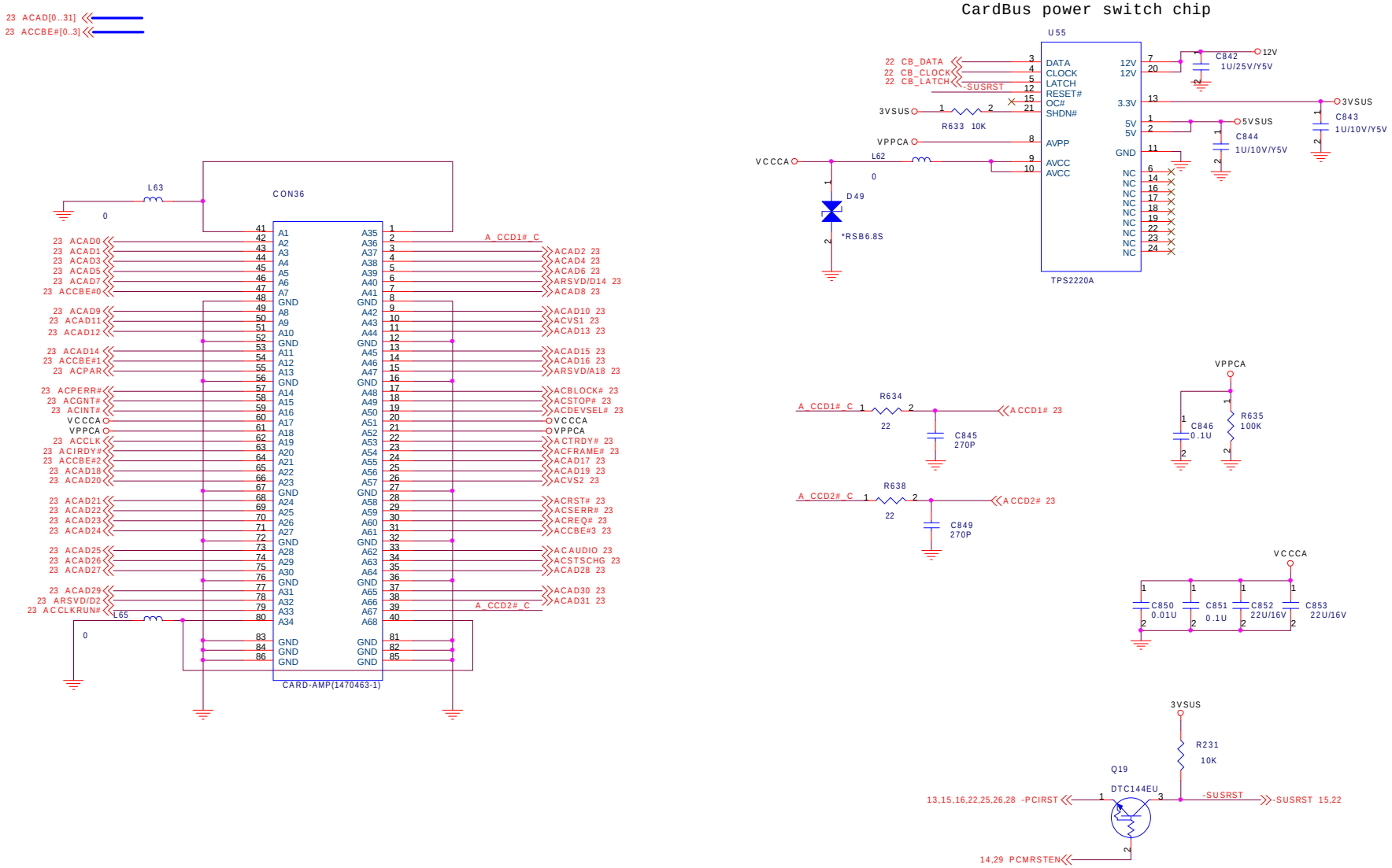


Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title	TI7420-A (CARDBUS+1394+MS)	
Size: Custom	Document Number: JE5.1 Main Board	Rev: 1A
Date: Tuesday, August 31, 2004	Sheet 23 of 36	

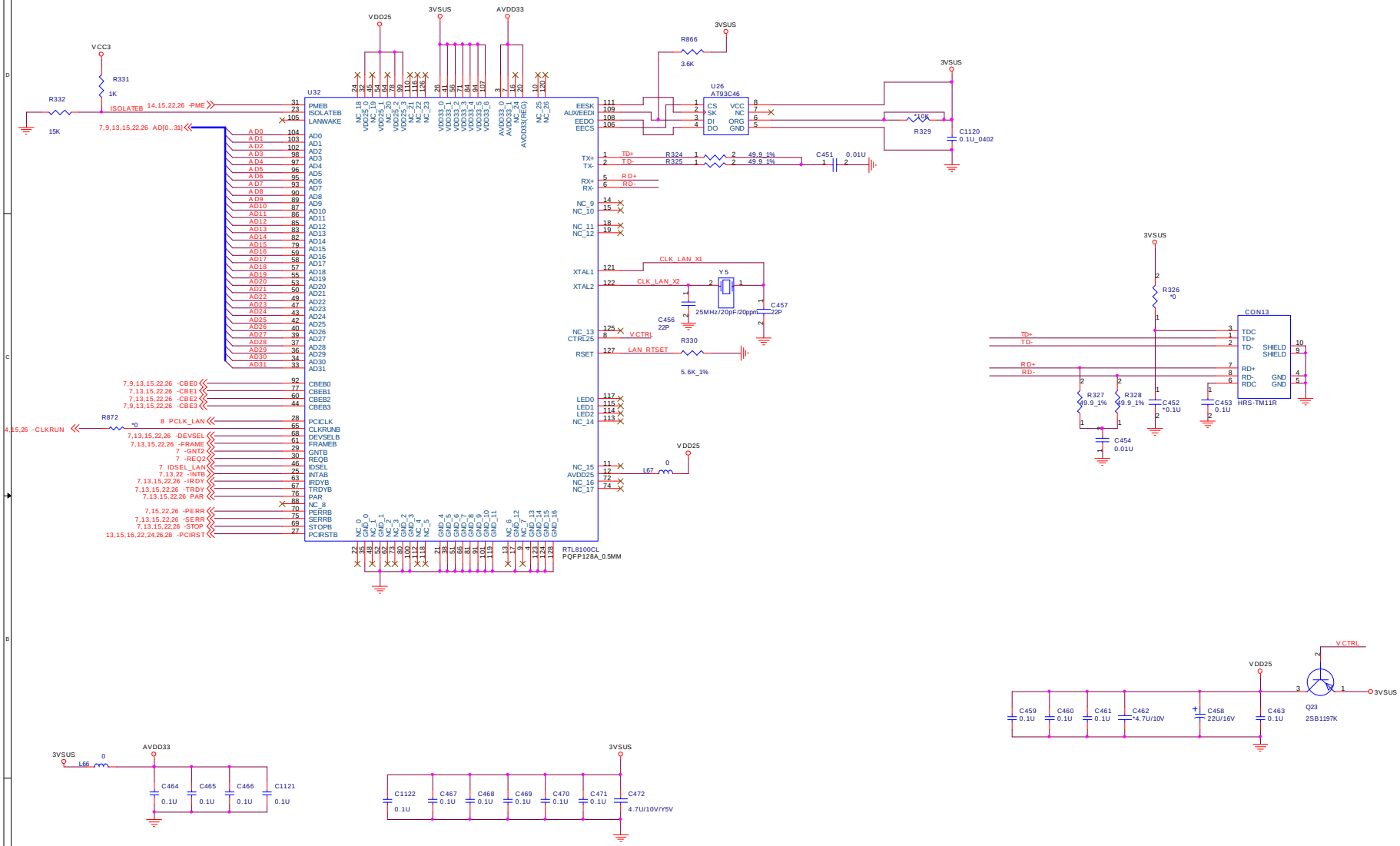
CardBus power switch chip



Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title: CARDBUS SLOT		
Size: B	Document Number: JE5.1 Main Board	Rev: 1A
Date: Tuesday, August 31, 2004	Sheet 24 of 36	



Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

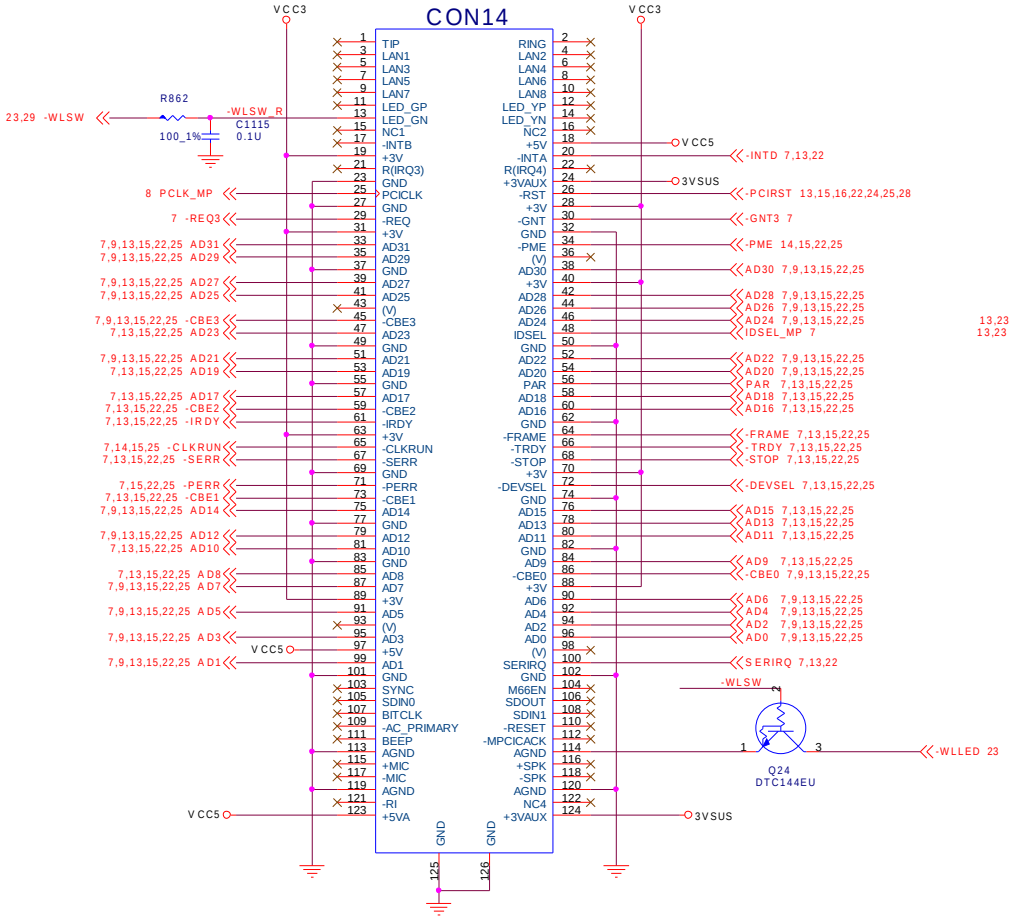
Title: RTL8100BL PCI LAN

Size: C | Document Number: JE5.1 Main Board | Rev: 1A

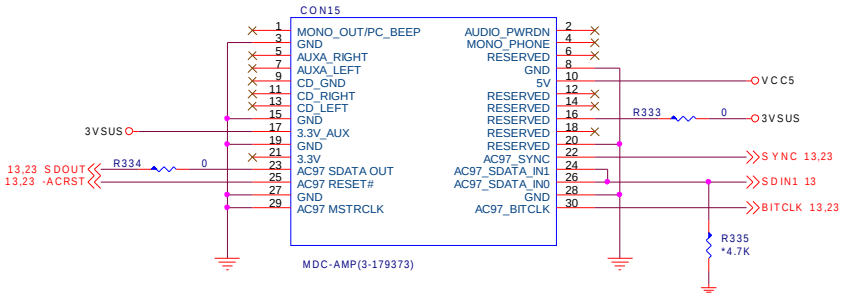
Date: Tuesday, August 31, 2004 | Sheet 25 of 36

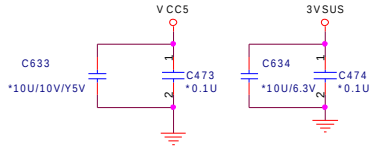
MINIPCI-AMP(440073-124)

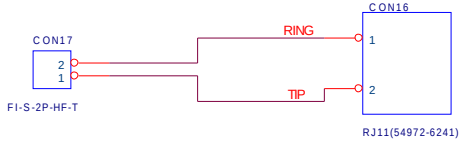
CON14

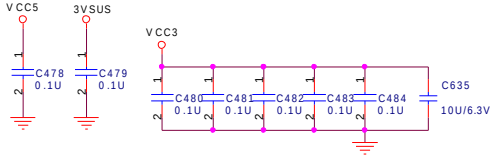


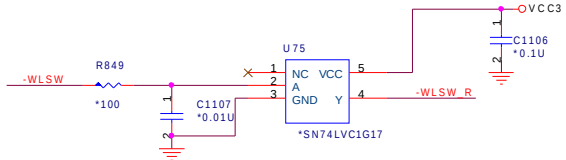
MDC (Hight 4.4mm)











Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title: MiniPCI & MDC

Size: B | Document Number: JE5.1 Main Board | Rev: 2A

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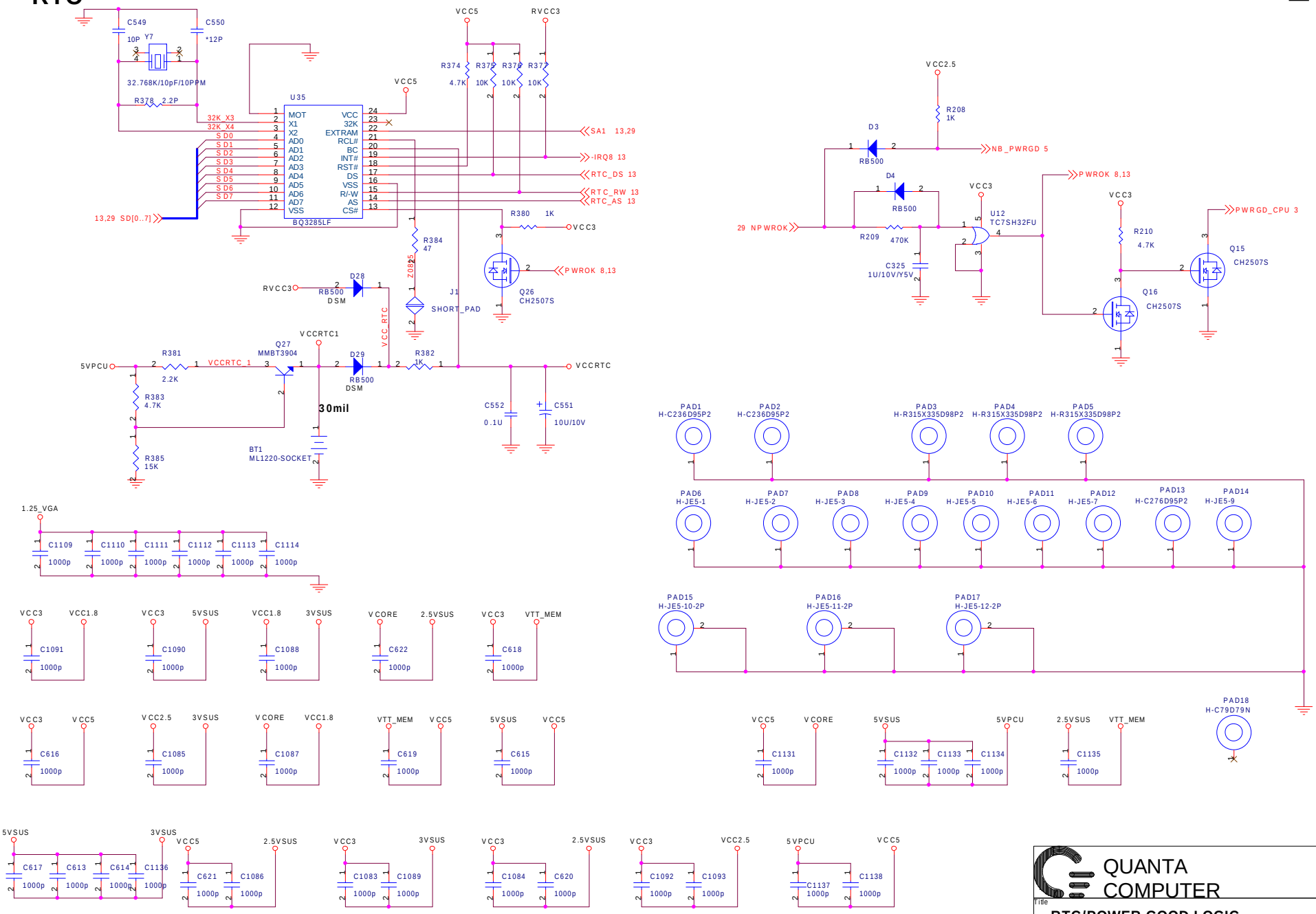
RTC



Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

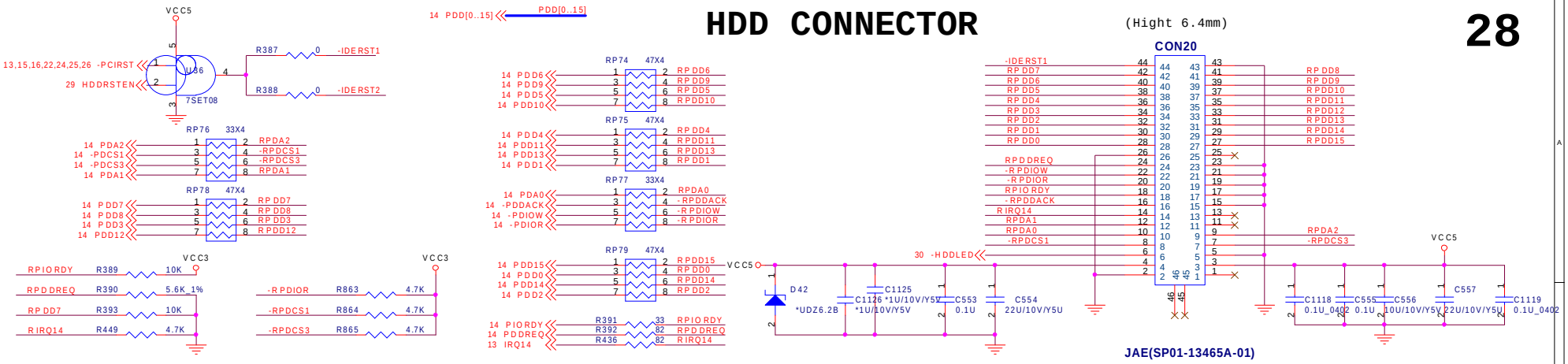
QUANTA COMPUTER

Title: RTC/POWER GOOD LOGIC		
Size: B	Document Number: JE5.1 Main Board	Rev: 2A
Date: Tuesday, August 31, 2004	Sheet 27 of 36	

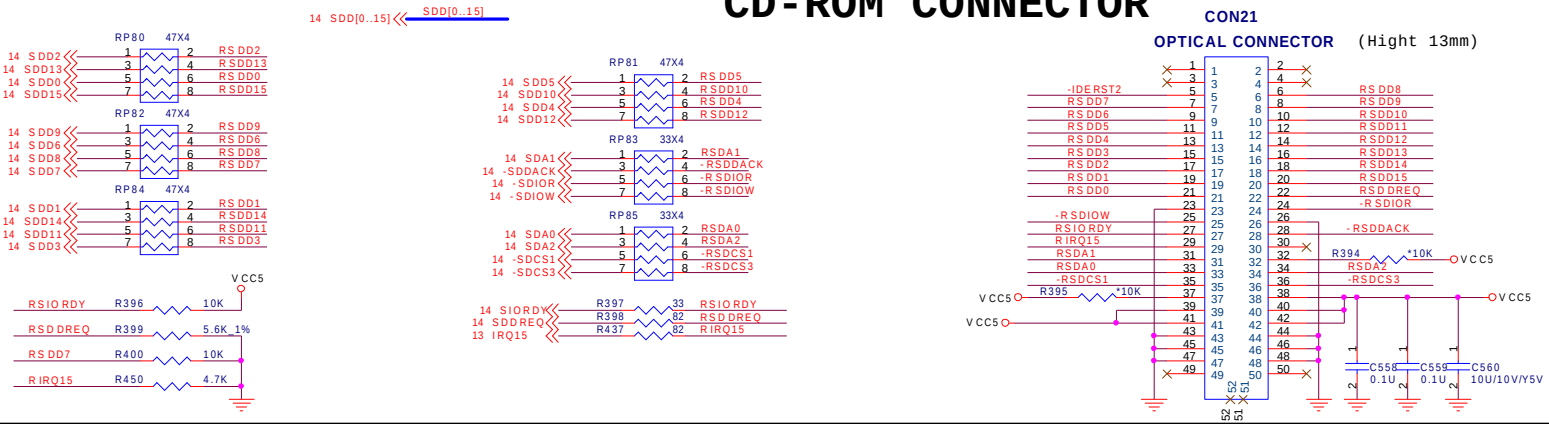
HDD CONNECTOR

(Hight 6.4mm)

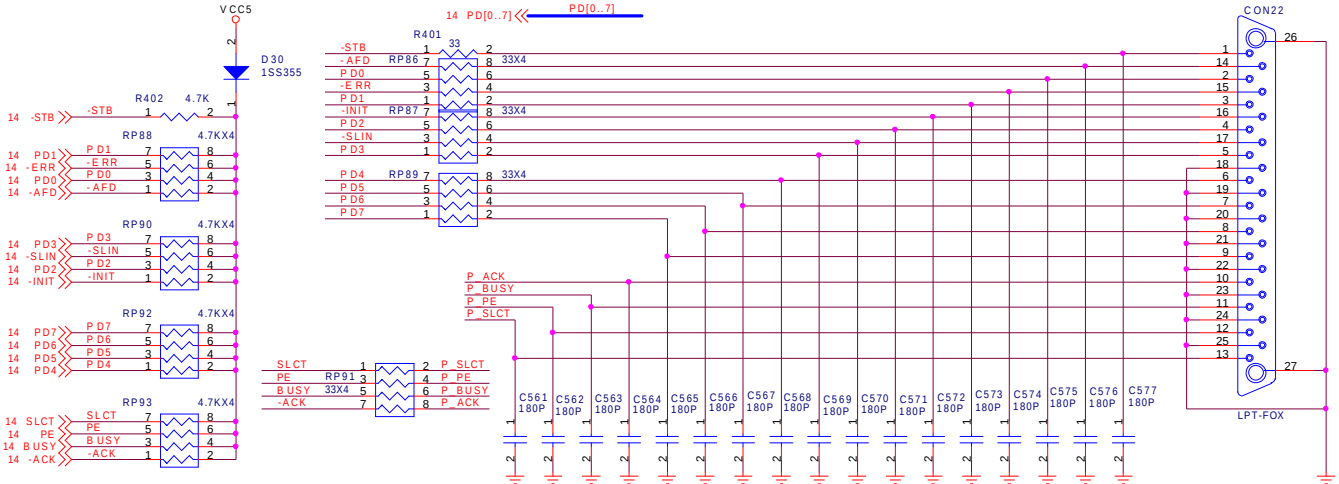
28



CD-ROM CONNECTOR



PRINTER port



Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Title	IDE/HDD/LPT Connector	
Size B	Document Number JE5.1 Main Board	Rev 2A
Date: Tuesday, August 31, 2004	Sheet 28 of 36	

U37

PC87570 Ver:C4

Model ID

5VPCU — R406 0 — PCU_ID

For debug only

KBDATA T269
KBCLK T270
MSDATA T271
MSCLK T272

Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

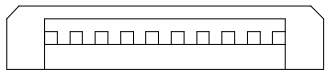
Title		
PCU NS87570		
Size B	Document Number JE5.1 Main Board	Rev 1A
Date: Tuesday, August 31, 2004	Sheet 29 of 36	

Int. keyboard

MX[0..7] MX[0..7] 29
MY[0..15] MY[0..15] 29

CON23

MOLEX(52610-2490)



RP96 10KX4
RP99 10KX4

5VPCU

U40 U41 *DALC208SC6

C588 0.1U
C590 0.1U

BIOS

BD[0..7] BD[0..7] 29
BA[0..18] BA[0..18] 29

U39 PMC-PM39F040-70JC

C589 0.1U

POWER SWITCH BOARD CONNECTOR

CON24

MOLEX(52559-2290)

FAN2 UNIT (Left position)

Q29 *DTC144EU
Q30 AO3404L
U43B LM358_FAN

FAN1 UNIT (Middle position)

Q31 *DTC144EU
Q32 AO3404L
U43A LM358_FAN

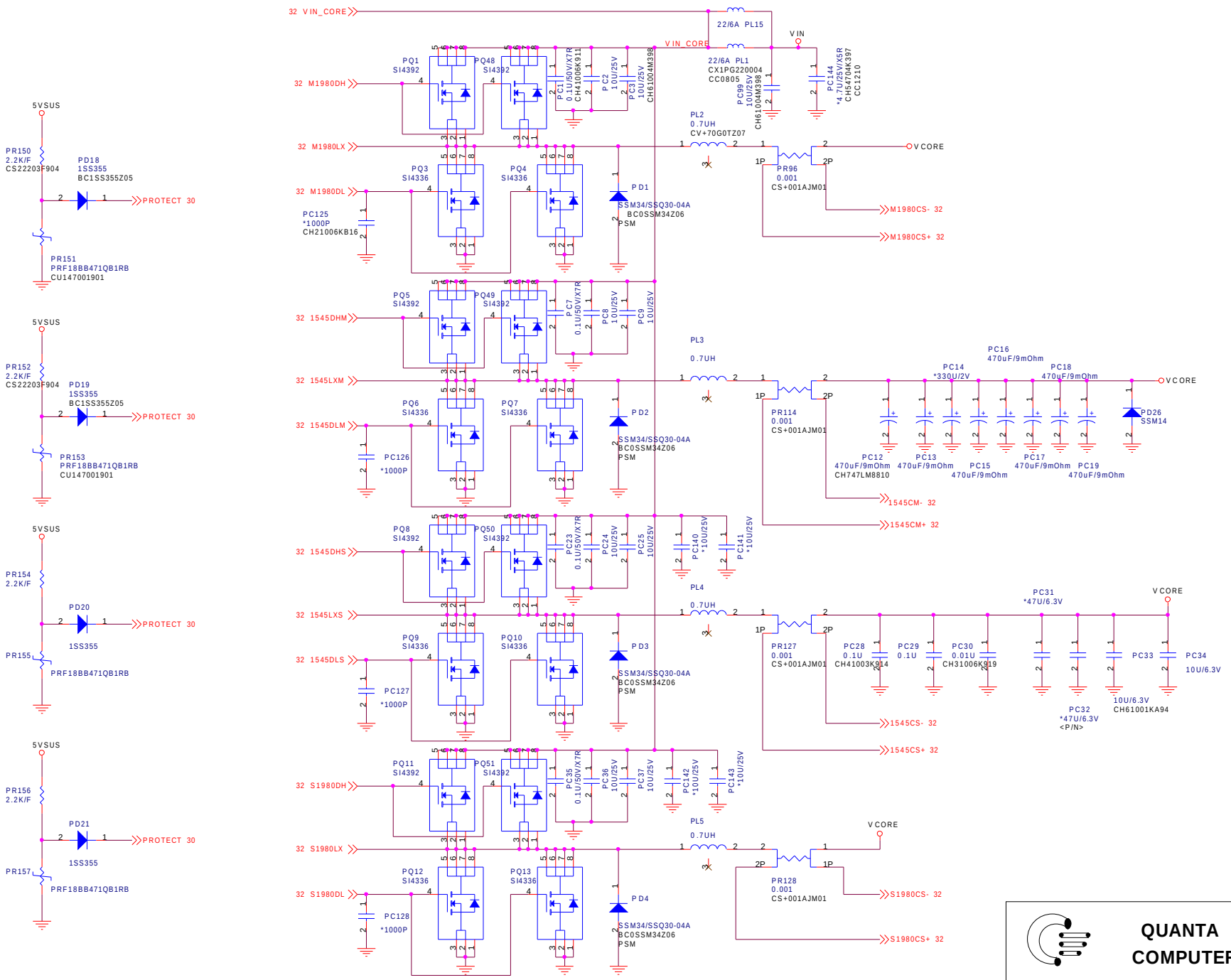
CHARGER BOARD CONNECTOR

PCN2 HEADER 30X2

Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

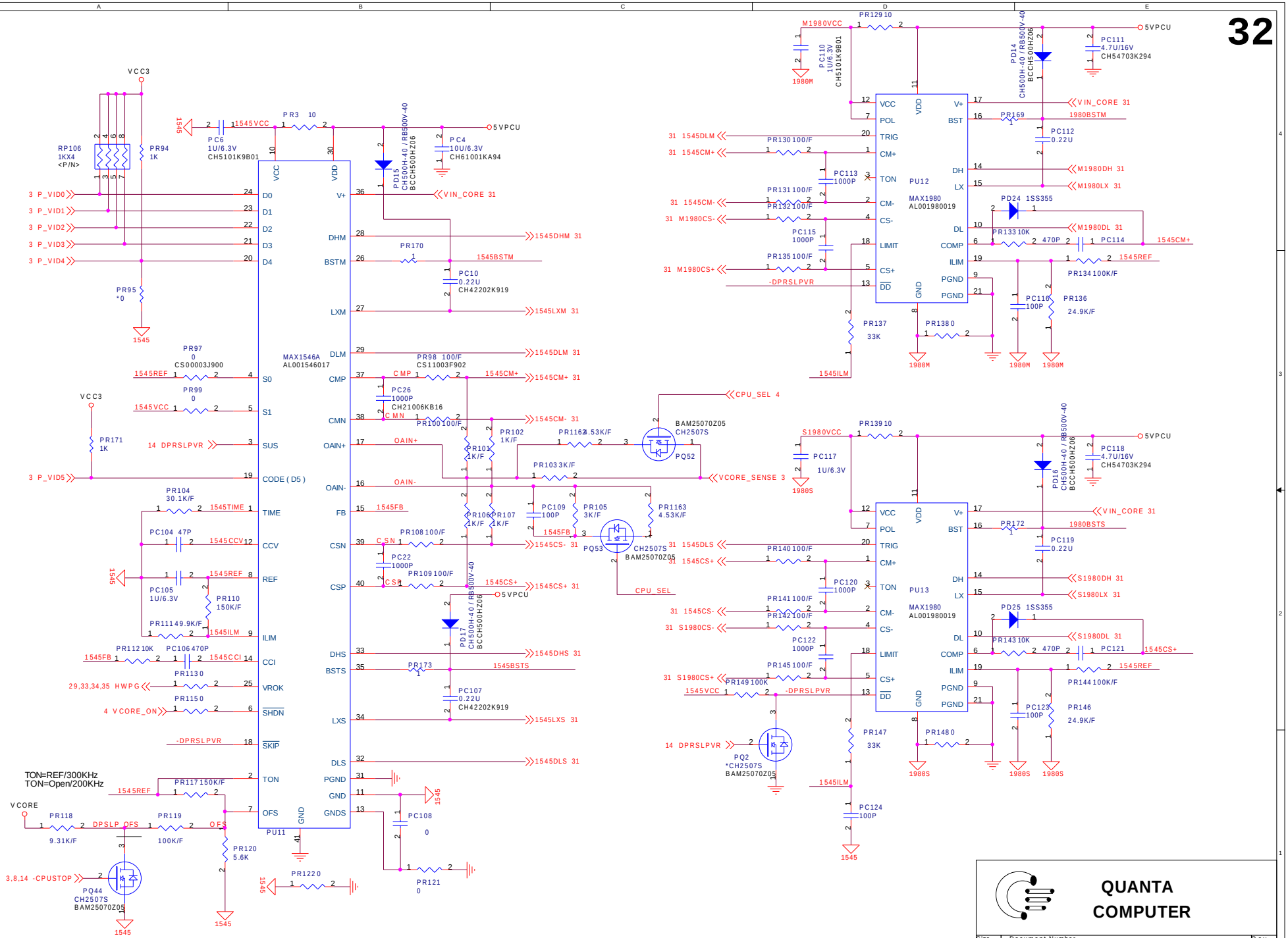
Title: INT. KEYBOARD/FAN
Size: Custom | Document Number: JE5.1 Main Board | Rev: 1A
Date: Tuesday, August 31, 2004 | Sheet 30 of 36

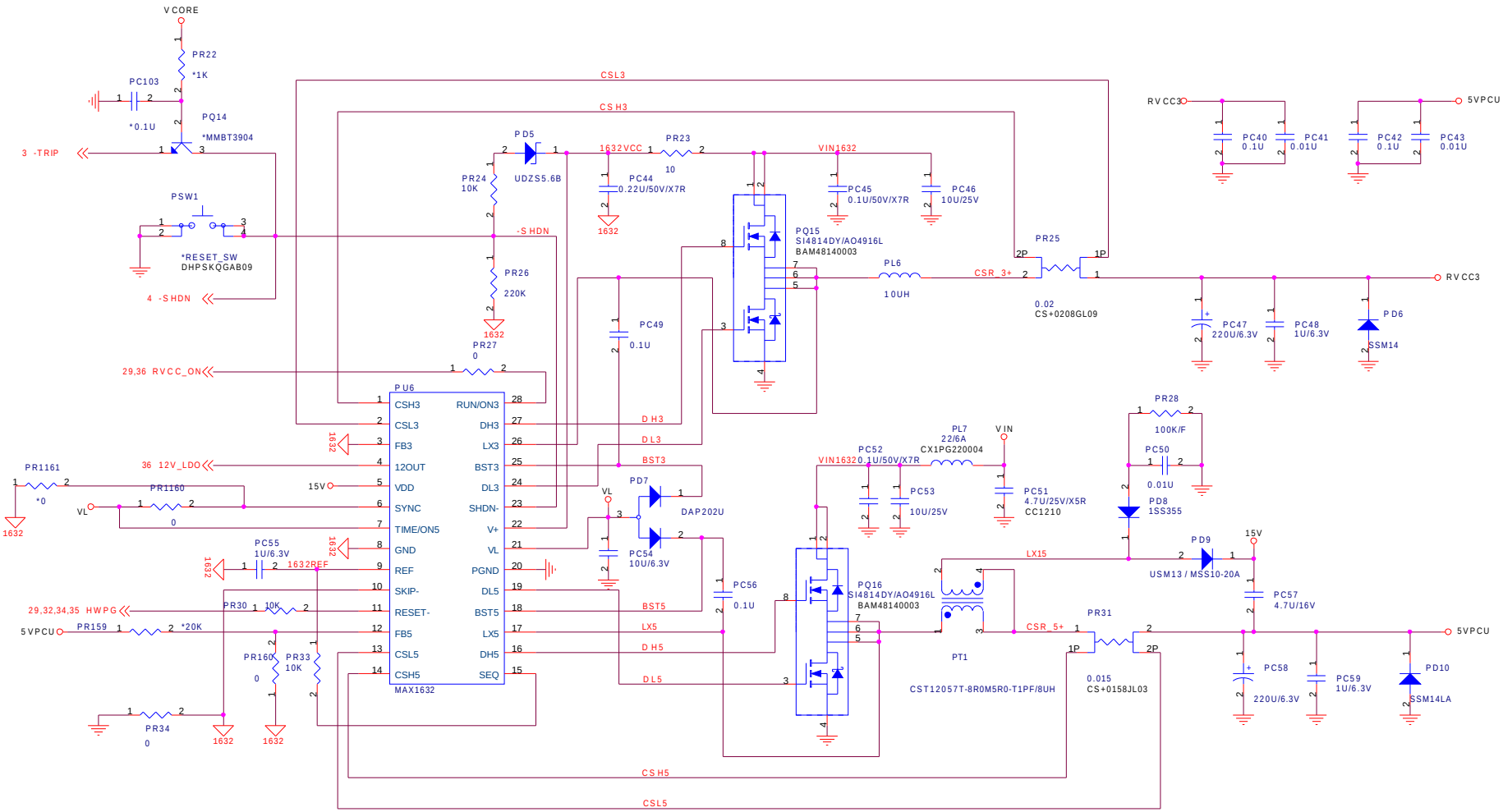


Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Size	Document Number	Rev
	JE5.1 Main Board	2A
Date: Monday, August 30, 2004	Sheet 31 of 36	

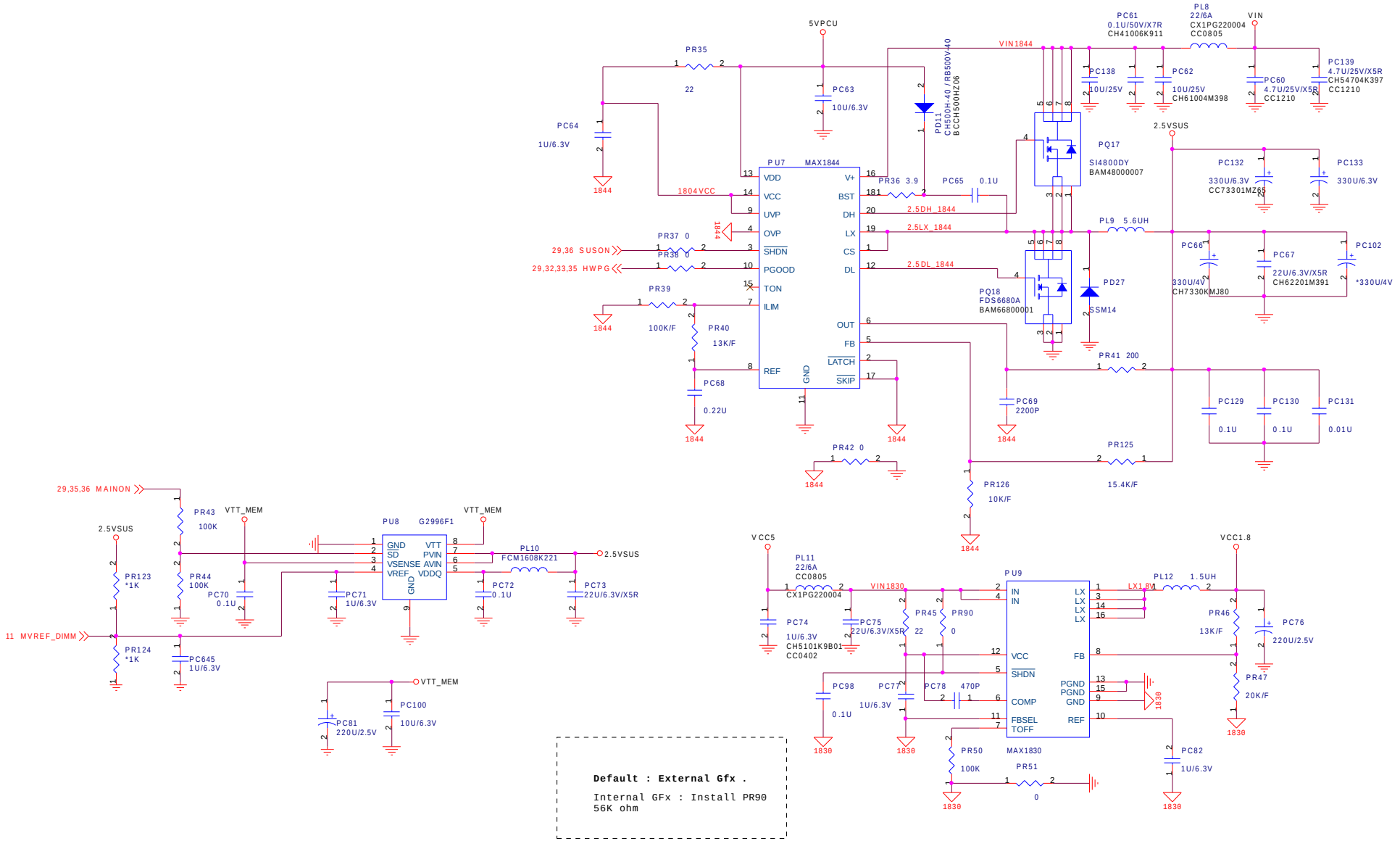

32
MAX1546A
AL001546017
PU11
MAX1980
AL001980019
PU12
PU13
QUANTA COMPUTER
JE5.1 Main Board
2A
Monday, August 30, 2004
Sheet 32 of 36
Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.



Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Size	Document Number	Rev
	JE5.1 Main Board	2A
Date: Monday, August 30, 2004	Sheet 33 of 36	



Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

QUANTA COMPUTER

Size	Document Number	Rev
	JE5.1 Main Board	2A
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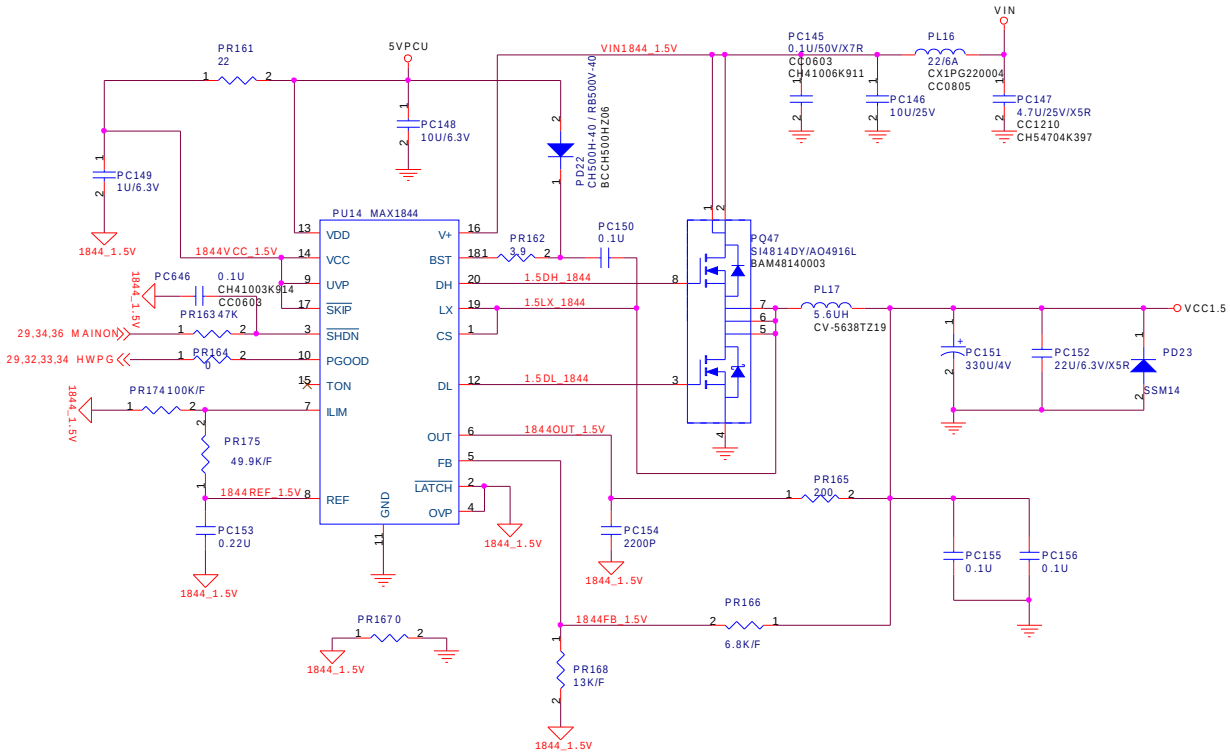

Default : External Gfx

Internal Gfx :

Remove all of components

.

Level 1 environment-related substances should NEVER be used.
Molding resin, ink, paint and covered wiring material should be procured from the supplier approved as a Sony's green partner.

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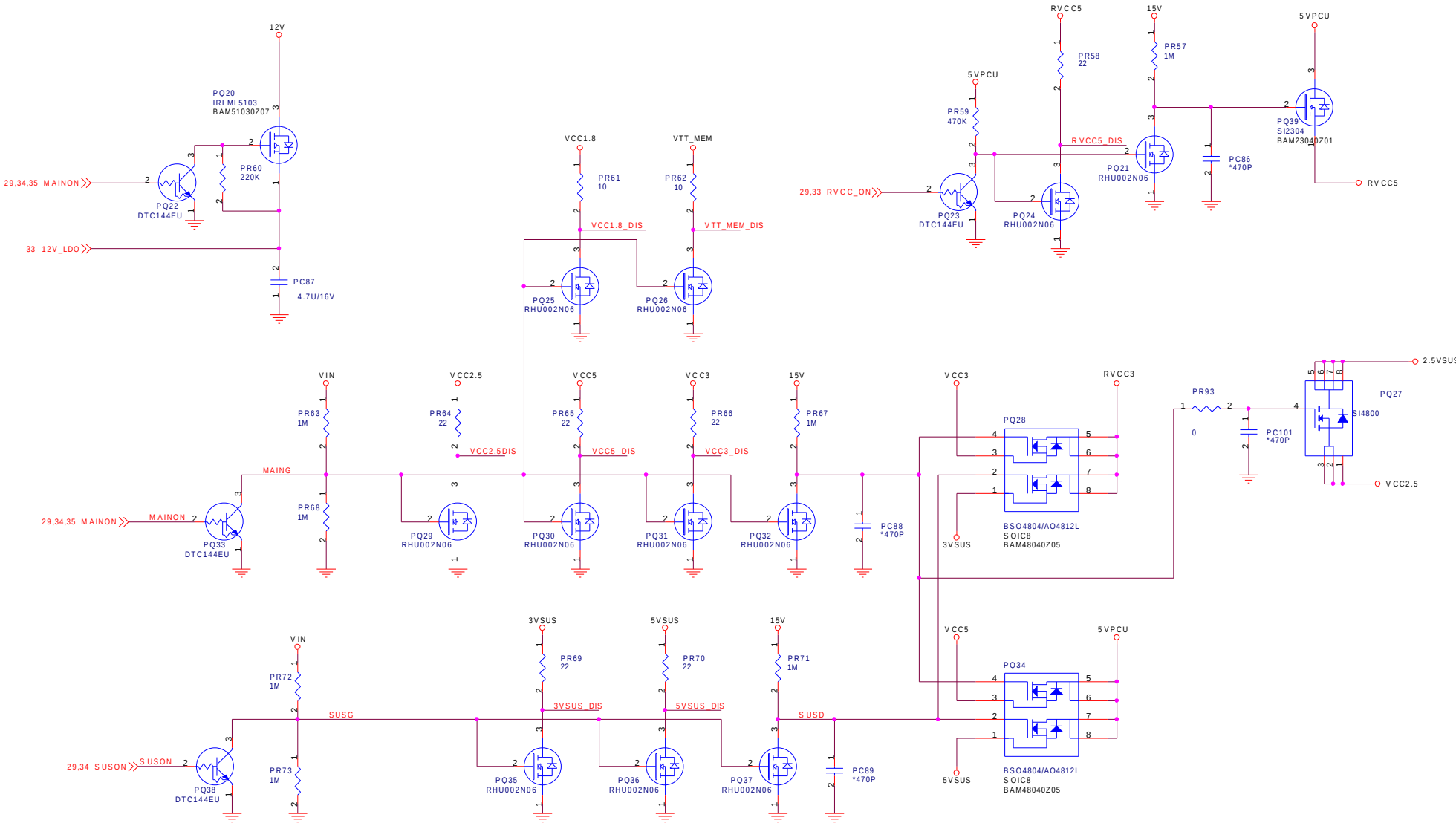

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